With the Compliments of the County Medical Officer of Health.

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GLOUCESTERSHIRE.

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Gloucestershire County Council.

4TH JULY, 1904.

SUMMARY OF THE

ANNUAL REPORTS

OF

The Medical Officers of Health

IN THE

ADMINISTRATIVE COUNTY OF GLOUCESTER FOR 1903.

 \mathbf{BY}

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COUNTY MEDICAL OFFICER OF HEALTH.

OFFICE OF THE CLERK OF THE COUNTY COUNCIL FOR GLOUCESTERSHIRE,

SHIRE HALL, GLOUCESTER.



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STROUD, June, 1904.

To the Sanitary Committee of the Gloucestershire County Council.

MY LORDS AND GENTLEMEN,

I beg to lay before you my second Summary of the Annual Reports (for 1903) of the Medical Officers of Health in the County.

In presenting this Summary I would draw your attention to the late dates at which many of the Reports were received. This fact in itself renders the work of summarising much more arduous, owing to the short space of time in which they have to be reviewed in order that the Summary may not have to be delayed until your October Meeting. And not only so, but it does not allow of that uniformity of treatment which a more leisured perusal would permit.

This is the third occasion (the former were in 1898 and 1903) on which this Summary will have been submitted at your July Meeting.

I have the honour to remain,

My Lords and Gentlemen,

Your obedient Servant,

J. MIDDLETON MARTIN,

County Medical Officer of Health.

ARRANGEMENT OF DISTRICTS.

The number and arrangement of the Sanitary Districts in the Administrative County was the same in 1903 as in previous years, but a part of the Barton Regis Rural District—with an area of 271 acres and a population (at the Census of 1901) of 421—was transferred to Bristol under the Bristol Corporation Acts of 1901 and 1902. I have made the corresponding alterations throughout this Report. There are 14 Urban and 23 Rural Districts, but 38 Annual Reports were received, as there are two Medical Officers of Health for the Wheatenhurst Rural District.

CHANGES IN STAFF.

During 1903 there were no changes in the Medical Officers of Health, but since the end of the year Mr. W. Ellis and Mr. T. Robinson (Sanitary Inspectors for the East Dean and Dursley Rural Districts) have died.

DATES OF RECEIPT OF ANNUAL REPORTS.

From Table I. it will be seen that the Reports have been received a little earlier than they were last year, though considerably more than half were not sent "within, at most, "three months of the end of the year," as directed by the Local Government Board.

TABLE I.

Date of of Ro	Rece	ipt	District.	Style.
Jan. Feb.	19 3		Winchcombe Rural	
,,	8		Barton Regis Rural	
,,	12		Wheatenhurst Rural (Frampton Division)	
,,	16		Horfield Urban	
,,	22		Stow-on-the-Wold Urban	Orralastralad
,,	23		Northleach Rural	Withou
,,	26		Dursley Rural	>>
Mar.	1		Marston Sicca Rural	Printed
,,	8		Stroud Rural	//
,,	10		Stow-on-the-Wold Rural	Written
,,	14		Cheltenham Urban	Printed
,,	22	• •	Campden Rural	,,
,,	25		Nailsworth Urban	1
,,	30		Newent Rural	
,,,	31		Kingswood Urban	Printed
Apr.	4		Pebworth Rural	,,
,,	9	• •	West Dean Rural	,,
,,	15		Coleford Urban	,,
,,	23	• •	Warmley Rural	,,
22	27		Stroud Urban	,,
May	20		Cheltenham Rural	,,
,,	28		Chipping Sodbury Rural	
June			Charlton Kings Urban	Written
"	3		Cirencester Rural	. Printed
,,	3		Gloucester Rural	,,
"	3		Tetbury Rural	,,
22	3		Awre Urban	,,
"	3		Cirencester Urban	,,
"	3		Newnham Urban	,,,
"	3		Tetbury Urban	,,
"	3	• •	Westbury-on-Severn Urban	1 1
"	3	• •	Thornbury Rural	. Typewritten
,,	4	• •	Faringdon Rural	1 ''
"	7	• •	East Dean Rural	. Printed
,,	7	• •	Lydney Rural	• ,,
,,	8	• •	Tewkesbury Urban	′′
"	13	• •	Tewkesbury Rural	. Typewritten

TABLE I. AND IV. (L.G.B.)

The Tables for Statistics issued by the Local Government Board have again, in some cases, not been filled up strictly according to the instructions printed on the Tables; but, so far as I can gather from the Reports, the amount of inaccuracy is less than in previous years. The County Rates are consequently not strictly correct, but they more closely approximate the truth even than they did last year. It is to be hoped that, where it has not been done this year, attention will be paid to these instructions, and that on future occasions it will be possible to calculate strictly accurate County Rates.

POPULATION.

Each new year that intervenes between us and the Census increases the difficulty in obtaining an accurate estimate of the population, on which the Rates for the year have to be calculated. At present the interval between the times at which a Census is taken is ten years, but an effort is being made to have a less elaborate counting of the population taken in 1906—that is, five years after the Census of 1901. If this attempt is successful, it will be most valuable in enabling more correct ideas to be formed as to the populations of the various Districts during the present intercensal periods.

My estimates of the population of the County have been obtained by the method used by the Registrar-General, assuming that the population is increasing at the same rate as during the last intercensal period, a method which is more reliable for such large populations as that of the County than for those of small Districts The populations thus estimated

TABLE II.

Population, Number of Inhabited Houses, Average Number per house, Variation 1891-1901.

(Calculated from the "Census of Gloucestershire," 1901.)

Revised for alteration of boundaries to Oct., 1902, from Summary Tables of Census, 1903.

A	Area in Statute Acres.	Population.		Increase or Decrease. No. Per Cel	Decrease. Per Cent.	Inhabited Houses 1891. * 190	Houses 1901.	d) *	number of per house. 1931.
753,369		96,178	229,279	+ 2,001	6.6 +	50,200	51,735	4.82	4.43
791,191		323,661	331,118	+ 7,457	+ 2:3	70,136	73,481	4.62	4.51
14,291		330,902	377,321	+ 46,419	+ 14:3	55,690	68,410	5.94	5.51
805,482		654,563	708,439	+ 53,876	+ 8.2	125,826	141,891	5.20	4.99
37,327,479		29,002,525	32,527,843	+ 3,525,318	+ 12.2	5,451,497	6,260,852	5.32	5.195

^{*} Census of Gloucestershire, 1901.



NUMBER PER HOUSE. DISTRICTS, HOUSES, POPULATION, AVERAGE OF -AREA TABLE III.-

Table revised for alterations of boundaries to October, 1902, from Summary Tables of Census, 1903.

Table 1641	nasi i	Table levised for effectation	9	daries to co	, , , , , , , , , , , , , , , , , , , ,		of boundary (work) trong transfer of controls				
		i, in the second	Inhabited Houses	Houses.		Poj	Population.			persons p	persons per house.
		Acres.	1891.0	1901.	1891.	1901.	Increase o No.	or Dec	Decrease. Per cent.	1891.	1901.
Urban Districts-					Proposition of the Control of the Co						
Awro	:	4,329	259	258	1,148	1,096	- 52	1	4.5	4.43	4.25
Charlton Kings	;	3,399	682	874	2,995	3,806	+ 811	+	27.1	4-39	4.36
Cheltenham	:	4,726	9,592	10,352	47,121	49,439	+ 2 318	+	6-7	4.91	4.78
Circucester	:	5,286	1,545	1,621	7,521	7,536	+ 15	+	67	4.87	4.65
Coleford	:	2,067	561	619	2,450	2,541	+ 91	+	3.7	4.37	€8.∓
Horfield	;	832	37	176	645	1,435	+ 790	+	122.5	17.44	8.15 +
Kingswood	:	1,525	1,810	2,446	9,114	11,961	+ 2,847	+	31.2	5.04	€8.∓
Nailsworth	:	1,597	712	744	2,993	3,028	+ 35	+	1.2	4-20	4.07
Newnham	:	1,937	273	596	1,401	1,184	- 217	ı	15.5	5.13	4.45
Stow-on-the-Wold	-:	45	353	325	1,525	1,386	- 139	ı	9.1	4-32	4-27
Strond	:	1,169	2,042	2,003	9,818	9,153	- 665	1	8.9	4.81	4.57
Tetbury	;	114	465	454	2,173	1,989	- 184	- 1	8.5	4.67	₩.38
Tewkesbury	:	2,532	1,169	1,226	5,269	5,419	+ 150	+	8.5	4.51	4.43
Westbury-on-Severn	:	8,264	98∓	422	2,005	1,866	- 139	ı	6.9	09.₹	4.43
TOTAL URBAN DISTRICTS	:	37,822	19,936	21,746	96,178	101,839	+ 5,661	+	5.9	4.82	4.68
Rural Districts—											
Bartou Regis	:	18,803	2,503	2,954	12,135	14,646	+ 2,511	+	20.7	4.97	4-97
Campden	:	23,726	1,371	1,319	6,060	5,441	- 619	- 1	10.2	4.42	4.13
Cheltenham	:	18,401	1,012	1,034	4,670	4,637	- 33	1	Ŀ	4.62	4.49
Chipping Sodbury	:	63,284	3,835	3,943	16,795	17,621	+ 826	+	4.9	4.38	4.47
Cirencester	:	80,991	2,979	2,931	12,877	12,084	- 793	1	6.5	4 32	4.12
Dursley	:	26.786	2,876	2,753	12,166	11,636	- 530	1_	4.4	4.23	4.23
East Dean and United Parishes	ses	28,626	4,263	4,305	20,401	20,011	- 390	1	1.9	4.79	4 65
Fariugdon (part of)	:	3,870	2,854*	271	1,266	1,179	- 87	1	6-9	4.29*	4.35
Gloucester	:	30,669	1,807	2,062	9,604	10,779	+ 1,175	+	12.5	5.32	5.23
Lydney	:	24,634	1,693	1,867	8,153	8,649	+ 496	+	6.1	4.82	4.63
Mariton Sicea	;	8,833	384	384	1,635	1,485	- 150	1	9.5	4.26	3.87
Newent (part of)	:	35,541	2,021*	1,649	7,432	7,067	- 365	1	4.9	4.32*	4.29
Northeach .	:	70,018	2,050	1,931	8,885	8,100	- 785	1	8.8	4.33	4.20
Pebworth	:	17,326	687	693	3,091	2,944	- 147	1	8.4	4.50	4.52
Stow-on-the-Wold (part of)	;	42,203	1,709*	1,515	7.142	6,473	699 -	1	9.4	4.38*	4.27
Strond	:	37,221	6,468	6,635	28,510	27,793	- 717	1	2.5	4.42	4.19
Tetbury (part of)	:	26,301	*696	855	3,983	3,800	- 183	1	46	4.53*	4.44
Tewkeshury (part of)	:	28,366	1,782*	1,199	5,139	4,986	- 153	I	3.0	4-28*	4 16
Thornbury	:	56,300	3,662	3,782	16,765	16,565	- 200	1	1.2	4.58	4.38
Warmley	:	10,007	2,723	3,367	13,118	15,945	+ 2,827	+	21.55	4.82	4.74
West Dean	:	21,461	2,547	2,742	11,697	12,624	+ 927	+	4.6	4.59	09.∓
Wheatenhurst	:	24,383	1,580	1,496	6,853	6,105	748	ı	6.01	4.34	4.08
Winchcombe (part of)	:	55,529	2,118*	2,048	9,106	8,709	- 397	1	4.4	4.36*	4.25
TOTAL RURAL DISTRICT	:	753,369	50,200	51,735	227,483	229,279	+ 1,796	+	-7.9	4.54	4.43
Administrative County	:	791,191	70,136	73,481	323,661	331,118	+ 7,457	+	2:3	4.62	4.51
Bristol and Gloucester	:	14,291	55,690	68,410	330,902	377,321	+46,419	+	14.3	2.94	5.51
Whole County	:	805,432	125,826	141,891	654.563	708,439	+53,876	+	2.2	5.20	4.99
England and Wales	1 00	87,327,479	5,451,497	6,260,852	29,002,525	32,527,843	+3,525,318	+	12.5	5.32	5.195
	5	Time to a new	() the	1001							

Preliminary Report, Census 1901.
 These figures are for the whole District (Preliminary Report, Census, 1901).
 (4.66 excluding barracks)



to the middle of 1903, taking into account the alteration in boundary before mentioned, are:—

			1903
Urban	Districts	 	103,145
Rural	,,	 	229,753
			332,898

Table III. gives various details of the population, number of inhabited houses and average number of persons per house during 1891 and 1901, in the Administrative County as altered up to the end of 1902.

AGE AND SEX DISTRIBUTION.

The alteration in the boundary of the County has necessitated a re-calculation of the factor for correction for the age and sex distribution of the population. This figure I have calculated to be '887—i.e., the population as now constituted is slightly more unfavourably distributed as to age and sex than before the alteration of the boundary; and consequently the correction to be made in the Rates before they are comparable with those for England and Wales is slightly greater than it was in 1902.

I referred fully to the importance of making these corrections in my Report for 1902.

VITAL STATISTICS.

Table IV. gives the summary of the vital statistics of the Administrative County for 1903, and the following Table the death rates for various diseases and groups of diseases. It will be noticed that the death rate for the County is consider-

ably lower than it has been in any year since 1898, and a similar low death rate is recorded in many of the constituent Districts, attention being called at the same time to the unfavourable climatic conditions for the year, which had one of the coldest summers, and was one of the wettest years on record. Dr. Garrett makes the most interesting observations on this point. The saving in Cheltenham occurred below the age of five years, and that "deaths from Pneumonia" and Bronchitis show a falling off of about 50 per cent., as "compared with previous years Respiratory "diseases and Measles are likely to be affected by conditions "of atmosphere, and last year's statistics confirm the moral "that moist, mild weather is more propitiatory to "Pneumonia and Bronchitis than harsh, dry weather."

Dr. Garrett's observations are found to hold true in the statistics for the Administrative County for 1903. During 1903 there were 372 less deaths than in the previous year. Of these deaths 199, or 53.5 per cent., were under the age of five years. Also there were 86 deaths from Bronchitis and 33 deaths from Pneumonia less than in 1902—i.e., together 32 per cent. of the total 372 deaths. Taking Measles into account, as respiratory complications are the chief causes of deaths in this disease, there was an additional saving of 32 deaths—a total of 151 deaths, or 40.6 per cent. of the saving of life during 1903 on the deaths in 1902.

BIRTH RATES.

The following Table gives the birth rates in the Administrative County and in the total Urban and total Rural Districts. It will be noticed that there was a distinct increase in the County rate as a whole, and also in the Urban rate; while the Rural rate is only slightly higher than in 1902. In

		-		- 1									0	T			9	-	F	EVER.			V	ĺ			1					_(_	11	11					1	1	
	Popu	ıla-	ı					Мо	rtality	from all	cause	s at					embranou				Za,						ases.				1		1	gans.	1	l	dents				
JRBAN DISTRICTS	tion estima by Medi Offic of Heal	cal er	Births,	Birth Rate,	Infant Mortality.	Deaths,	Death Rate,	Under 1 year.	under	5 and under 15, 15 and under 25,	25 and under 65,	65 and over.	Small-pox.	Measles,	Scarlet Fever,	Whooping Cough.	Diphtheria and Me Croup.	Croup,	Typhus.	Enteric. Other Continued.	Epidemic Influen	Cholera,	Plagne,	Diarrhoa,	Enteritis, Puerneral Fover	Erysipelas,	Other Septic Dise	Phthisis.	Other Tubercular Diseases.	('ancer,	Preumonia.	Pleurisv	Other Diseases of	ž ,,	Venereal Diseases.	Premature Birth.	Diseases and Accidents of Parturition,		Accidents.	Suicides,	Murder.
	10	086	90	26.7	34	4 18	16.5	1		1	l	6 10									. .	.	<i>)</i>					3		1 .	П		. 1			1		1	1		
Awre	0.0			25.7				15	2	1 2	2 1	6 21	ι								. .		1	1	4 .			5	1	4	5	5		٠		1		8	1	}	
Charlton Kings	. 505		-	21.3				91	27	19 19	21	4 296	3		2	5	3			3 1	1	1		16	1 :	ι		42	34	59 3	33 2	3 5	2 4	8	1	28	١	94	17	1	1 2
Cheltenham				22-3				25	9	2 6	3 3	38	3			5					. .	2		2	1	2	1	7	5	9	2	7	. 1	Ĭ		2		11	3	1	/
Cirencester		560					16.8	8	7	4	. 10	0 14	£	7			1				.							4	1	4	3 .	. .,			١	2	1		3		
Coleford							9.0	4	1	1		5 4	1	1		1	1				. 1	1		2.10							1	.	. 1			1		2			
Horfield		550				9 166		34	26	14 7	49	9. 36	3	. 1	9	2	7			1	. 1	1		2	9 1	1	3	8	6	10 1	5 9)		1		7	1	19	4		
Kingswood				31.0			13.8	8	1	2 3	3 15			Ĭ		1	1					.					٠ ا	3		3	3 1					1	1	1	2	1	:
Nailsworth .		035		27.0				9	1			2 6	3			1					W									1 .	. 1	1		1				2	,	()	
Newnbanı .		140		18.4	47				4		10	6		1		-												3	2	1	1 2	١	1	2		3		1			
Stow-on-the-Wold .		386		26.6		4	16-5	10	0	3 6	3 4			1		1	1				1	J		1	2	1		15		11 1:	3 8			4		1		5	5	3	(
Stroud .				20.1		8 134		16	0	1 1	1	1 10				1	. 1		1									1	5		4		1					5	1	1	1
Tetbnry .	. 1	952		23.0			16.9	2	2	1 1	1 1:	1 10							-				,		5	Y		7	9	5	5 5			2		1		14	1	1	
Tewkesbury .	. 5	420	143	26-4			17:5	14	6	4 6	5 25			1				2 .		1		••		-				1	5	4	0 4			-				5	2		1
Westbury-ou-Severn .	. 1	838	49	26.6			19.0	4		52 52	10	'	···		11	16	•••			5 1	16			24 2	2 3	3		99 5	57 11	2 87	7 65	2	8	17	1	43	-	171	40	8	1 60
Barton Regis .	. 15	6060	348	23-1	89	140	9.2	31	7	6 12	31	. 53				3	1					χ		:	3 1	1		13	1	6 11	l 17	.		2		2		8	4		6
Campdeu .	. 5	6486	131	23-8	53	78	3 13-2	7	10	1 3	17	35		4		1				2	1			3	3	1	• •	3	2	8 5	5 2		1			1		4	1	1 .	3
Cheltenbam .	. 4	650	88	18-9	57	58	12-4	5	4	1 1	1.8	3 29									1			2			2	3	1	3 10	3		1			•		6	2 .		. 2
Chipping Sodbury .	16	3500	462	28-0	78	240	14.4	34	13	5 11	55	122			1	3	1	.	. .		3			1 !	2	1		15	3 1	6 29	15	1				4	2	27	8	3	. 10
Circucester .	11	1926	280	23.4	100	168	14.1	29	9	2 3	49	75		٠		5		-	٠ .	-	6				1		1 .	14	3 1 15	5 21	6		2	•••		7		22	5 .	. [.	6.
Dursley .	11	1517	283	24.5	85	159	13.8	24	5	3 4	44	79		1	\	1	3	.			4	٠. ا		5	2		• •	8 .	16		14		7	4	0	2		19	10		. 6
East Dean	19	933	601	30.1	92	281	14.5	55	20	11 10	72	113			2	5	5			1	5			2	1 2	1	2	9	3 1	7 31	10	3	1			12	1	36	13	3 .	. 10
Faringdon (part of)	1	1179	25	21.2	120	12	10 1	3	1		1 5	2 6										١			.			1 .		.	2				• •	1			2 .		
Gloncester .	11	1178	207	18.5	81	124	11.0	12	3	3 9	38	59		٠.		2		.	. .	1					1			8	4 13		N.		1			6	••	10	0	2 .	. 4
Lydney .	8	8756	247	28-2	109	126	14.3	27	11	2 4	32	50		2	2	6		1 .	. .			1	٠.	2	3		1)	3	L a	5 7	10	1	1	• •		4	1	16	6	1	. 5
Marston Sicca	1	1449	29	20.0	275	26	17.9	8	1	1 1	. 4	11			1	3								:	2		[3	L S	2 1	1			• •	1	• •	• •		2 .		. 1
Newent (part of)	7	7067	176	24.9	74	8	12.0																															10	2	0	. 60
Northleach .	8	8100	222	27-4	113	125	2 15.1																							7 10									1 .		
Pebworth	2	2944	74	25-1	81	. 34	11.5	6	1	1	. 11	15						.	. .		1						1	1	1	.											
Stow-ou-the-Wold (part of)	(3473	151	23.3	66	94	14.5	10	3	3 5	28	45								1				:															8		
Stroud	27	7630	590	21-4	73	345	12.5			9 22					-					-				2 5															1		
Tetbnry (part of)	8	3764	70	18.5	100	36	9.5															1																	2 1		
Tewkesbury (part of	4	1987	101	20.3	109	6:	12:8	11	1	2 1	2:	25							• -	.	• •)	8	3	• •	••	4		7 2	1		• •								
Thornbury	16	5537	435	26.4	78	3 219	13.2	35	11	8 11	68	89		1	1		1		.	1	1		• •	3		• •	1	6 11	. 1:	5 14	20	1				0		20	4 8	3	68
Warmley	16	6830	460	27.3	91	. 17	7 10.5										**			1	0			0 4	,			9. 9		5 10	18		- 2	1,							
	19	2520	417	33.3	98	186	7 10·5 0 14·5	41	10	4 9) 4'	69		10		2					1	• •	٠.	4 5			1	0 8	1.	20	6		2	1		40					
West Deau																																			1				. 2		
West Deau Wheatenhurst:—																			1									Z	1	3 5	2										
		3688	79	21.4	51	1 48	3 13.0	4	1	2 1	1'	7 23	3															1				1		1				4	1	1	17
Wheatenhurst:—	7 3										1 1	7 23 3 12	2															1				1		1				4 1 20 8	1		17
Wheatenhurst:— Frampton Sub-Division	} } :	2265 8709	45 236	19·9 27·1	133	3 25 2 124	7 11.9	6 17	6	2 1 3 5	5 3	9 54									1			2 1			1	0 6	01	9	7	1	1 25	20		5 99	1 10 3	55 94	1 8 1 4 22	1	1219



England and Wales there was a slight fall in the birth rate, which had risen from 28.5 in 1901 to 28.6 in 1902.

TABLE VI.

	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893
Urban	23.5	21.6	22.9	22.7	23.2	27 0					
Rural	25.1	24.9	26.7	26.9	24.0	21.3					
Administrative County	24.6	23.9	25.5	25.5	23.6	25.6	25.2	23.2	26.9	25.9	26.3
England and Wales	28.4	28.6	28.5	28.7	29.3	29.4	29.7	29.7	30.3	29.6	30.8

^{*} Taken from summary of Reports prepared by Chairman of Sanitary Committee.
† Including the Wiltshire Parishes of Ashley and Long Newnton.
‡ Excluding Wiltshire Parishes.

The Districts which had the highest birth rates were Horfield Urban (33.5), West Dean Rural (33.3), and Kingswood Urban (31); those with the lowest, Newnham Urban (18.4), Gloucester Rural (18.5), and Cheltenham Rural (18.9). West Dean had the highest rate in 1902.

DEATH RATES. TABLE VII.

	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893
Urban	13.9	14.9	15.5	13.8	15.9	13.6					
Rural	12.9	14.2	13.8	15.5	14.1	12.9					
Administrative County	13:2	14.4	14.2	15:2	14.9	13.2	14.6	14:1	15:4	13.6	15•4
Ditto, corrected for Sex and Age Distribution	11.7	12:9	12:8	13.7	13·4	11:9	13·1	12.7	13:8	12:2	13.8
England and Wales	15:4	16:3	16.9	18:2	18:3	17:6	17:4	17:1	18:7	16.6	19.2

^{*} Taken from summary of Reports prepared by Chairman of Sanitary Committee. † Including the Wiltshire Parishes of Ashley and Long Newnton.

‡ Excluding Wiltshire Parishes.

The total corrected death rate for 1903 is the lowest death rate for the County of which I have records—viz., 11·7. But, as I have before explained, the figures are not given so accurately in some of the Reports as to enable me to calculate strictly correct rates for the County. It is probable that the death rate is somewhat higher than I have given, owing to the deaths of non-residents being excluded in some Districts, while the deaths of residents dying in public institutions beyond the Districts have not been included. Still, even taking this into account, the death rate for the County is low.

The death rates in the separate Districts will be found in Table V., from which it will be seen that those with the highest rates are the smallest Districts. Possibly this is only accidental.

INFANTILE MORTALITY.

The Infantile Mortality is the lowest for the County of which I have any record, and it is gratifying to see such a fall in the infantile death rate, both in the Urban and Rural Districts. I have already pointed out that the general greatest saving of life last year was amongst children under the age of five years (53.5 per cent), but a large proportion of this was in children under the age of one year (31.2 per cent.). The Table given below shows the rates for the Urban and Rural Districts, the Administrative County and for England and Wales.

		Smal	lpox	Diph	theria nbrar Crou	and lous p.	Erysir	elas	Scarl	let F	ever.	Enter	ic Fe	ever.	Puerpe Feve	ra l	Chiek	t.	Meas	les.	Т	otal.	
	Population, 1931	Cases.	Hospital Cases.	Cuses,	Deaths.	Hospital Cases.	Cases.	Deaths.	Cases.	Deaths.	Hospital Cases.	Cases.	Deaths.	Hospital Cases.	Cases.	Deaths,	(ases	Deaths.	Cases.	Deaths.	Cascs.	Deaths.	Hospital Cases.
rban Districts—																							
Awre Charlton Kings Cheltenham Cirencester Coleford Horfield Kingswood Nailsworth Newnham Stow-on-the-Wold Stroud Tetbury Tewkesbury Westbury-on-Severn Charlton Kings When Districts	7536 2541 1435 11961 3028 1184 1386 9153 1989 5419 1866	1		65 2 1 52 14 	3 1 1 1 7 1	33	25 10 2 1 7 1 46		2 142 43 13 1 188 2 3 3 1 69 1	9	62 	17 4 1 4 3 			2 2 	1 1 1 2	166			7 1 1 	2 4 250 54 15 6 245 16 4 11 1 91 1	9 2 8 1 19 1 1 2 	16.3
Totals—Urban Districts	. 101658		-	-	- -		-	7	-	-	_	-	-	-		- -		-		-			-
Gloucester Lydney Marston Sicca Newent (part of) Northleach Pebworth Stow-on-the-Wold (part of) Stroud Tetbury (part of) Tewkesbury (part of) Thornbury Warmley West Dean Wheatenhurst	4637 17621 12084 11636	2 3 3 3 3 4 3		2 1 1. 14 14 	2 2 333 1 4 4 227 2 5	6 .	10 10 10 10 10 10 10 10 10 10 10 10 10 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 35 42 42 41 47 41 41 41 41 41 41 41 41 41 41 41 41 41	1 1 2 2 1 2 2 1 3 3 3 1 1 5 5 3 3 1 1 5 5 3 3 1 1 5 5 6 6 6 6 6 6 6 6 4 4	1 3 11 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	21	11 11 11 11 11 11	1				55			47 71 50 46 220 2 2 2 76 2 76 2 2 36 100 3 14 169 9 143 169 13 143 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	4 8 10	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Totals—Rural Districts	2292	79 12		10 2	69	19 1	7 14	16	4 7	39	8 16	2 6	7	7 1	3	8	4 5	27		2 1	8 127	0 60)
Administrative County	2011	18 14		12	100	33 8	50 19	20	7 12	07	10.28	0 0	6	12 2	6 1	1	6	43	-	2 2	8 197	1 10	5



	1903	1902	1901	1900	1899	1898	1897	1896	1895
Urban Rural	96	118	114 95	120 95	145 108	106 92			
Administrative County	89	106	101	102	118	99	110	105	123
England and Wales	132	133	151,	154	163	161	156	148	161

TABLE VIII.

The Districts with the highest rates were Marston Sicca Rural (275), Circnester Urban (154), Charlton Kings Urban (150), and Wheatenhurst Rural (Haresfield Division) (133). In only seven Rural Districts did the rate exceed 100.

NOTIFIABLE DISEASES.

The total number of cases of infectious disease notified during the year was 1,974, of which 43 were Chicken Pox (a notifiable disease in five Districts) and two Measles (which was notifiable in one District). Excluding these two diseases, the total number was nearly 600 less than in 1902, and was the lowest since 1899, when the total was 1,884.

SMALL POX.

Cases of this disease occurred during 1903 in eight Districts. The number of cases was 14. This disease was introduced into the County in six of the Districts by tramps, in one by a navvy working on the railway, and in the Chipping Sodbury Rural District by a patient from the Mineral Water Hospital at Bath, an account of which is given in the summary for that District. This is the largest number of cases of Small Pox that has occurred in the County since

^{*} Taken from summary of Reports prepared by Chairman of Sanitary Committee.

the epidemic of 1896. It was extremely fortunate that there was no serious spread of the disease, considering the number of occasions on which it was introduced at various points, and the fact that so large a proportion of the population is unvaccinated. With the exception of two cases, all were removed to Hospital. In these two instances the house was put in quarantine.

Reference has often been made by those who aver that vaccination does not prevent Small Pox to the immunity from this disease which Germany enjoys as being due to "the strict system of isolation of Small Pox" in that country and not to the efficiency with which vaccination and revaccination is carried out. To obtain accurate information on this point Dr. Bruce Low, on behalf of the Local Government Board, visited some of the principal towns of Germany in the autumn of 1903, and made full inquiries and investigations. In his Report, issued in March, 1904, Dr. Bruce Low says that he was unable to see "current Small Pox "cases undergoing isolation, as no cases of the disease existed "in Germany, so far as the Central Health Office were aware "at the time of (his) visit." He visited a large number of hospitals in which Small Pox was treated when cases were introduced into the country, and concludes his Report thus:—

"The description which I have given of the position of the Small Pox Pavilion at each of the Hospitals visited in Germany shows conclusively that there is not in that country strict system of isolation of Small Pox in the sense as we in England understand it. With one or two exceptions, the pavilion is shut off in no way from the rest of the Hospital, and there is no limitation in the number of

"persons residing within the several zones around the "Hospital.

"Nor is the administration of the Small Pox Pavilion entirely separate from the general administration of the Hospital establishment. The German nation, therefore, by the agency of compulsory vaccination and rewaccination, is able to dispense with separate Small Pox Hospitals altogether. It is not necessary there to provide for Small Pox a separate site nor separate administration. Germany is in this way freed from great expense, not to speak of the suffering and inconvenience which fall upon the English nation Germany, indeed, would have less need even for Small Pox pavilions on the sites of her General Hospitals than she has at present were it not for the continual importation of Small Pox by foreigners, or by German subjects returning from foreign countries."

SCARLET FEVER,

TABLE X.

	1903 ‡	1902	1901	1900	1899	1898	1897	1896 *
Cases	1207 19 382 1·58 ·06	1615 32 385 1·98 ·10	1144 22 228 1·9 ·06	1293 27 317 2·1 ·08	1081 18 1·67	968 13 1·34	1239 24 1·94	1239 43 3·07
England and Wales: Death rate per 1000		.15	·13	·12	.12	·11	·14	·18

^{*} Taken from Reports of Chairman of Sanitary Committee.

[†] Including the Wiltshire Parishes of Ashley and Long Newnton (Tetbury Rural District).

[‡] Excluding Wiltshire Parishes.

Scarlet Fever was less prevalent in the Rural Districts of the County during 1903 than in the previous year to the extent of 40 per cent., but more cases occurred in the Urban Districts than in 1902. The disease is still of a mild type, and appears to have been spread in most of the Districts where it was prevalent by unrecognised cases at school. one district four children were found in a school "desqua-"mating freely" by Dr. Findlay, Medical Officer of Health, Campden Rural District. Dr. Garrett says: "In reviewing "the thirty years' statistics of zymotic disease what is chiefly "to be noticed is not a gradual decrease in the numbers, but "an absence in the later years of the disastrous epidemics "which occurred in certain years at the earlier periods. . . "(this) appears to indicate that it is in the prevention of "disastrous epidemics that sanitary measures have had the "greatest effect upon the zymotic diseases, whilst the "liability to these diseases has remained." To advance the stage further in the prevention of Scarlet Fever and also Diphtheria it is necessary that the causes of the spread—the mild unrecognised cases so often referred to in the Annual Reports—should be detected. This is one of the objects of a systematic medical inspection of schools, and there is, I think, every reason for believing that we shall achieve much in this direction by such a system of medical inspection of school children as is to be tried in the Stroud District —if it is made thorough and systematic—combined with efficient isolation of all cases.

The percentage of Urban cases isolated fell from 58 in 1902 to 47 in 1903, due chiefly to the large number of cases in the Kingswood Urban District, which is not provided with an Isolation Hospital. The proportion of cases removed to

Hospital in the Rural Districts has steadily risen from 5 per cent. in 1900 to 22 per cent. in 1903.

DIPHTHERIA AND MEMBRANOUS CROUP.

TABLE XI.

	1903	1902	1901 †	1900	1899	1898	1897	1896 *
Cases	409	509	484	516	361	288	357	272
Deaths	33	62	47	62	61	57	71	62
Hospital Cases	50	58	160	123				
Case Fatality	8.07	12.2	9.7	12.0	16.9	19.8	22.2	22.8
Death rate per 1000	.10	.19	.14	.18				
England and Wales: Death rate per 1000	• •	•23	•27	•29	•29	•20	•24	•20

^{*} Taken from Reports of Chairman of Sanitary Committee.

There was during 1903 a decline in the number of cases of Diphtheria and Membranous Croup, chiefly in the Rural Districts of the County. East Dean Rural District suffered most severely, with 140 cases (of which 11 were removed to Hospital), and, as in other districts, the disease appears to have been spread by mild unrecognised cases at schools. Of this District Dr. Bond says the only course practicable was to "keep a careful observation on children who were kept away "from school even for a single day, and to visit them with a

[†] Including the Wiltshire Parishes of Ashley and Long Newnton (Tetbury Rural District.)

[‡] Excluding Wiltshire Parishes.

"view of ascertaining whether there was any reason to "suspect throat affection as the cause of their absence, "and, if so, to deal with them accordingly. I have no doubt "that if this course could have been efficiently pursued the "epidemic could have been stamped out much sooner than "it is now dying out. Prompt and energetic action in dealing "with the mild and often unsuspected cases of Scarlatinal "and Diphtheritic sore throat causing absence for a day or "two for 'a cold,' is the only practicable way of preventing "the ordinary sporadic occurrence of this affection from "developing into the regularly recurrent epidemics which "have hitherto characterised this in common with all the "other infectious diseases of childhood." In the case of Diphtheria we have the most valuable accessory means of diagnosis in the bacteriological examinations for which the County Council have made arrangements. With this aid and systematic examination of all "contacts" with known cases of the disease a greater control can be possessed over the spread of Diphtheria even than of Scarlet Fever, for which disease we have at present no such bacteriological test.

The fatality from this disease has fallen from 22.8 per cent. in 1896 to 8.1 in 1903. This decrease began earlier in the Urban than in the Rural Districts, possibly from the earlier use of antitoxin in the former districts. The proportion of cases isolated has varied greatly from year to year, depending on whether the disease has prevailed chiefly in Districts with or without Hospital accommodation. In 1903, 12 per cent. of cases were removed to Hospital.

FEVER.
(Enteric and Continued).

TABLE XII.

	1903	1902 ‡	1901 †	1900 †	1899	1898	1897	1896
Cases	96	109	105	179	163	96	100	82
Deaths	12	14	12	31	34	11	27	21
Hospital Cases	26	21	23	35				
Case Fatality	12.5	12.8	11.4	17.3	21.5	16.7	27.0	25.6
Death rate per 1000.	.03	.05	.03	.09				
England and Wales: Death rate per 1000		·13	·16	·17	•20	.30	•16	.17

^{*} Taken from Reports of Chairman of Sanitary Committee.

This disease was less prevalent in 1903 than in any of the preceding four years. In only one year of which I have records were less cases notified—viz., 1896 with 82 cases. Of the total number (96) 21 occurred in the Lydney Rural District. These form a group the cause of which was obscure, as will be seen from the account given in the summary for the Lydney Rural District. In four Districts the disease appears to have been waterborne and in one by milk. The one case in Kingswood Urban District was traced by Mr. Perrott, and found to be probably due to infected cockles.

The case fatality (12.5 per cent.) is nearly the same as it

[†] Including the Wiltshire Parishes of Ashley and Long Newnton (Tetbury Rural District).

[‡] Excluding Wiltshire Parishes.

was in 1902, but, taking the Urban and Rural Districts separately, 17.2 per cent. in the former and 10.4 in the latter. The proportion isolated in Hospital was 27.1 per cent. of cases, by far the highest in years of which I have records.

PUERPERAL FEVER.

A smaller number of this disease was notified during 1903 than in any year since the District Reports were first summarised, the total being 11, six of which (55 per cent.) were fatal. It is of interest to note that while in the past eight years the total notifications received have been in the proportion of 100 Urban to 196 Rural, for Puerperal Fever the figures are 100 to 278; also that while the average Urban case fatality was 25 per cent., that in the Rural Districts was 51 per cent. When also it is realised that it is only the severe cases that are notified—and, indeed, are often only known of when death ensues—some idea of the suffering caused by the much more numerous less severe cases which occur can be formed; and, as this happens chiefly in the Rural Districts in which mothers are more dependent on "midwives" at the time of their confinements than in towns, it will, I think, be clear that the need of protecting women in child-birth—which is the object of the Midwives Act, 1902 is very real, and it is to be hoped that much improvement may follow as this Act comes more fully into operation.

SPECIAL DISEASES.

At the time of writing my last Report I was engaged in making an investigation into the distribution of Cancer and other Malignant Diseases, Phthisis and other Tubercular Diseases, and Lobar and Broncho-Pneumonia, in this neighbourhood, with respect to elevation and geological formation. In any investigation of this kind it is only by taking small areas that anything like homogeneous conditions can be obtained; but there are certain factors, affecting death rates, which are unobtainable for small areas—e.g., age and sex distribution of the population and occupation. I adopted such groupings, however, that the effects of these factors were reduced to a minimum, and I was able to arrive at certain suggestive conclusions.

When I next attempted to apply these conclusions to the death rates in the Civil Parishes contained in the Stroud Union, the effects of the above factors were distinctly noticeable; but, as accurate information concerning them was not forthcoming, I could only approximately allow for them. Making such allowances for sex and age distribution and for occupation as was possible, it was observed that the general conclusions drawn with regard to the distribution of the diseases considered could be seen to hold good. death rates for these diseases in the Sanitary Districts in Gloucestershire were next considered, but it was found that the diversity of conditions in the individual Districts was too great for any distinct effects to be noticed, save a general agreement with the relation between the death rates from Phthisis and Pneumonia. It is not practicable to give here the details of my investigation, but the general results tend to indicate that:—

- 1. Cancer is more prevalent on impervious soils than on porous, but does not appear to be influenced directly by elevation.
- 2. Other Malignant Diseases appear to support the above in that the general tendencies are in the same directions.

- 3. Phthisis is more prevalent on impervious soils and at low (below 150 feet) and comparatively high (350 to 500 feet) elevations than on porous structures and at moderate elevations. High elevations appear to favour the development of Phthisis.
- 4. Other Tubercular Diseases do not appear to be so directly influenced by elevation, though they are mostly prevalent at elevations below 100 feet on an impervious subsoil.
- 5. Pneumonia (Lobar and Broncho) seem to be affected in the opposite directions to Phthisis by both subsoil and elevation.

The conclusions with regard to Phthisis and Pneumonia receive an interesting confirmation from the rates in the Sanitary Districts, in that there is a distinct tendency for the death rate from one disease to be high in those Districts where the death rate from the other is low, and vice versa. With regard to the proportional increase of Phthisis at high elevations, it is noteworthy that a similar result has been observed in Germany. One explanation given is that in these high positions what would be a gentle breeze lower down, here becomes a gale, and the effect is that people live with closely shut-up houses, producing even worse conditions of atmosphere than obtains at lower elevations.

But, without further investigations extended over a larger area and a more prolonged period, it is inadvisable to accept the above conclusions as more than suggestive and indicative of the general tendency. The Districts in the County with the highest and lowest average rates (uncorrected for age and sex distribution) from the following diseases are:—

CANCER	Phthisis	PNEUMONIA
(1897-1902)	(1896-1902)	(1900-1902)
Faringdon Rural 2.33	Awre Urban 1.89	Stroud Urban 1.42
Stow-on-the-Wold Urban 1.27	Horfield Urban 1.86	Chipping Sodbury Rural 1.36
Nailsworth Urban 1.23	Tewkesbury Urban 1.65	Thornbury Rural 1.21
Cheltenham Urban 1·20	Westbury-on-Severn Urban 1.58	Horfield Urban 1·18
Cirencester Urban 1.20	Charlton Kings Urban 1.42	Warmley Rural 1·15
Barton Regis Rural ·47	Barton Regis Rural ·60	Nailsworth Urban ·23
Newent Rural ·45	Winchcombe Rural ·60	Tetbury Rural ·13
Newnham Urban ·40	Faringdon Rural58	Awre Urban
Tetbury Rural ·31	Newnham Urban ·48	Newnham Urban 0
Horfield Urban ·24	Pebworth Rural ·44	Tetbury Urban
Administrative County \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1.01	.83

TUBERCULAR DISEASES.

In many of the Reports reference is made to the subject of the prevention of Consumption, and in the Cirencester Rural District definite steps have been taken to secure a bed in the Sanatorium which is being built by private and public munificence for the three Counties of Gloucestershire, Wiltshire and Somersetshire, at Winsley, near the junction of the three Counties. This Hospital, of 60 beds, is now

ISOLATION HOSPITAL ACCOMMODATION.

The effectual control of infectious diseases depends on, firstly, the recognition of all cases; and, secondly, on the complete isolation of all cases, either in their homes or in Hospitals. Unrecognised cases are, perhaps, the dangerous in spreading infectious disease: for, generally, the condition which causes them to be unrecognised is the mildness of the attack, with, as a consequence, little interference with the movements of the patients, who associate with their fellows as freely as usual. To this cause many of the outbreaks of Scarlet Fever and Diphtheria were attributed by Medical Officers of Health in the Reports for the year 1903; and not infrequently this is also true for In the sections of my Report Typhoid Fever. Bacteriological Diagnosis, on Schools, and on the various notifiable diseases will be found fuller references to this matter, the importance of which is scarcely realised as yet generally. On the other hand, the second of the above conditions—the need for the isolation of cases of infectious disease—is acknowledged by everyone. Yet, though it also is generally recognised that effective isolation is impossible in the small homes of the poor (among whom the majority of cases occur), the provision for this isolation cannot be described as other than inadequate. Of the 37 Districts in the County there are still 10 with no Isolation Hospital of any kind, and 22 with no provision for isolating Small Pox; and in several other Districts provision appears to have been made for only one disease at a time. In one case it was "very expedient" to remove a Typhoid Fever patient; but, as the Hospital was already occupied by Scarlet Fever cases, the patient was placed in a ward with a child convalescing

TABLE XIII.

ISOLATION HOSPITAL ACCOMMODATION.

URBAN DISTRICTS.

		GENERAL DISEASES.			SMALL-POX.					
DISTRICT.	No. of Situation. No. of Beds. No. of Beds. Disinfector.		Disinfector.	GENERAL REMARKS.						
Awre		None			None					
Charlton Kings		Delancey Hospital,			Delaneey Hospital			Washington Lyons		
Cheltenham		Chelteuham Delancey Hospital		100	Delancey Hospital			>>	Separate Isolation Hospital for Ladies' College on another site.	
Circnester		Cirencester		12	South Ceruey		2 Cottages	Antiquated gas	Joint Hospital with Circneester Rnral District.	
Coleford		None			None			disinfector one	Joint District constituted by Connty Council, 1901.	
Horfield		Southmead, Barton	Regis		None				Typhoid Fever cases treated in Workhouse Infirmary.	
Kingswood		R.D. None			None				Joint Report with Medical Officer of Health to Warmley Rural District. 2 sites inspected by Medical Officer of Health. Special Report to Urban District Council.	
Nailsworth		Caiuscross (joint)		44	Bisley (joint)		12	Goddard, Massy and		
Newpham		None			Noue			Warner's, steam	Medical Officer of Health has frequently drawn attention to want of	
Stow-on-the-Wold					None				Hospital. Tent for Small-Pox, jointly with Stow Rural District. Hospital wanted.	
Stroud		Cainseross (joint)			Bisley (joint)		10	Goddard, Massy and Warner's, steam	Fever used 1903.	
Tetbury		None			None				Medical Officer of Health remarks on need.	
Tewkesbury		Tewkesbury							Arrangement with Tewkesbury Rural District to use respective Hospitals for Small-Pox and general infectious diseases.	
Westbury-on-Severn		None			None					



from this disease—fortunately, in this instance, with nounhappy sequel.

The most powerful influence which induces District Councils to provide isolation accommodation in their areas appears to be the actual prevalence of infectious disease in their Districts. Then, for a time, there is great activity, and in some cases a Hospital is hastily arranged; but even by the time this is ready for use the epidemic has done its work, claimed its victims, and fades away. It is in times when there is little or no infectious disease, and when the sanitary staff are not fully occupied in controlling cases at their homes that steps for providing a Hospital can be most advantageously taken, and a Hospital built most cheaply. This is especially true with regard to Small Pox Hospitals, in which disease isolation amongst a population not fully protected by vaccination—most essential.

It is not only necessary that there should be a building to which cases can be removed, but it is also essential—if the Hospital is to fulfil its functions effectually—that it should be conveniently approached and always available, and that it should be properly equipped for the purposes for which it is intended. It would appear, so far as can be gathered from the Annual Reports, that this is not the case in some of the Hospitals already provided. In some cases the Hospital is not easily accessible, and in others no means of disinfection, etc., are provided.

The summary of the existing accommodation in the Administrative County (made up from the Annual Reports for 1903 and previous Reports) will be found in the accompanying Table.

The Districts still without Hospitals of any kind at the end of 1903 were:—

Urban.

Rural.

Awre.

Stow-on-the-Wold.

Coleford.

Tetbury.

Kingswood.

West Dean.

Newnham.

Stow-on-the-Wold.

Tetbury.

Westbury.

AWRE, NEWNHAM, TETBURY AND WESTBURY-ON-SEVERN URBAN AND TETBURY RURAL DISTRICTS.

With respect to the "Combined District," which includes the following of those given above, Awre, Newnham, Tetbury and Westbury-on-Severn Urban Districts, and Tetbury Rural District, Dr. Bond says: "The only addition "to the resources of the Combined District in the way of "hospital accommodation made during the past year has "been in connection with the small hospital on Chipping "Sodbury Common belonging to the Council of that "District."

COLEFORD URBAN AND WEST DEAN RURAL DISTRICTS.

Nothing appears to have been done in these Districts to carry "The Coleford and West Dean Hospital (County of "Gloucester) Order, 1901," into effect. It was reported last year that this matter was being deferred especially as to obtaining a site for the Hospital until some definite arrangement is arrived at with reference to the Coleford Water Supply.

No definite progress appears to have been made in this matter of water supply, as the boring in Birchamp Wood to a depth of 300 feet failed to discover sufficient water, and the work was stopped. The steps which Dr. Buchanan describes as being taken in these Districts for the prevention of the spread of infectious diseases seem to be as good as possible under present conditions, although not sufficient for the purpose in view, and it would appear to be advisable that some definite steps should be taken to render the Order of the County Council effective.

KINGSWOOD URBAN DISTRICT.

In 1902 the Medical Officers of Health of this District and the surrounding Rural District of Warmley made a joint Report on the provision of Isolation Hospital Accommodation for the two Districts, after a unanimous memorial from the Medical men practising in these Districts urging the necessity of such a Hospital had been received by the respective Councils. During 1903 Mr. Perrott inspected two sites, and reported to his Council as to the probable cost of a Hospital. As a temporary measure, he suggests that his Council should rent a couple of isolated cottages.

STOW-ON-THE-WOLD URBAN AND RURAL DISTRICTS.

The Medical Officers of Health of both these Districts draw attention to the need of an Isolation Hospital. Mr. Dening (Urban District) says: "I think it is a great pity "there is not one for the whole Rural and Urban Sanitary "Districts." A tent is kept for the joint use of these two Districts in the event of a case of Small Pox occurring, and it was so used for one case in 1903.

In 1896 a suggestion was made by the County Sanitary Committee for a combination of these two Districts with Campden Rural District with a joint Hospital at Moreton-in-the-Marsh. The only accommodation that the last-named District has at present is in the Isolation Ward at Moreton Cottage Hospital, which is available for only two parishes. The case of Small Pox which occurred in this District during 1903 was nursed in a tent, the "furnishings" of which are kept in a cottage at Todenham.

THORNBURY RURAL DISTRICT.

Dr. Bond says: "The site for an Isolation Hospital" still exists, but no further progress has been made in providing one. Nor has any advance been made in regard to the provision of any appliance for disinfection, beyond the ordinary fumigating candle."

A farmhouse at Crawless, near Berkeley, is rented and kept available for the reception of cases of Small Pox.

The following Districts appear to have no Isolation Hospital for Small Pox:—

Urban.

Awre.

Coleford.

Horfield.

Kingswood.

Newnham.

Stow-on-the-Wold.

Tetbury.

Westbury.

Rural.

Barton Regis.

Campden.

Chipping Sodbury.

Dursley.

Faringdon.

Gloucester.

Lydney.

Newent.

Stow-on-the-Wold.

Tetbury.

Warmley.

West Dean.

Wheatenhurst.

Winchcombe.

With respect to those Districts in which Isolation Hospitals have been provided the accommodation does not seem altogether satisfactory from the remarks made in various Reports. I am not in a position to speak personally as to the nature of the existing Hospitals, with the exception of the Delancey Hospital at Cheltenham and that now being erected near Stroud, for the joint use of the Stroud Urban and Rural and Nailsworth Urban Districts, which are both well equipped, and provide accommodation for isolating three or four diseases at the same time. At both these Hospitals there are steam disinfectors. These, with the Disinfector at the Barton Regis Hospital, Southmead, are the only three steam disinfectors in the Administrative County; but there is one available for the Pebworth Rural District at Evesham, in Worcestershire. In three or four Districts last year the spread of infectious diseases was attributed to the want of efficient disinfection.

The following remarks are made in the respective Reports:—

CIRENCESTER URBAN AND RURAL DISTRICTS (JOINT).

Dr. Bond asks: "Shall we prepare ourselves to meet "(another outbreak) by providing not only increased but "improved accommodation for promptly isolating those who "may be attacked, and thus pursue a consistent policy in "this matter, or shall we fight the foe with one hand tied "behind our back, as it practically is at present? "The time has come when the Rural and Urban Councils of "Cirencester should consider the propriety of either "enlarging the accommodation which the present Hospital

"affords, or of providing a new Hospital elsewhere."

HORFIELD URBAN DISTRICT.

(Two beds are reserved for this District in the Barton Regis Hospital at Southmead.) Mr. Peake says: "There "remains the further question of dealing with Small Pox, "which demands your prompt and careful consideration." As the Local Government Board Regulations forbid the "use of a Hospital for Small Pox and other infectious diseases "at the same time, the arrangement with Barton Regis" would not enable you to send any case there. You are, "therefore, faced with the responsibility of finding some "place for this purpose, and all arrangements should be made beforehand, so that if the emergency arise, isolation can be ensured without delay. In no disease is immediate isolation so necessary as in Small Pox. I suggest that you "open negotiations with Barton Regis to this end."

TEWKESBURY URBAN AND RURAL DISTRICTS.

(The arrangement made last year to use the Rural Hospital for cases of Small Pox and the Urban Hospital for cases of general infectious diseases appears to still obtain.)

BARTON REGIS RURAL DISTRICT.

Dr. Murray says: "The Isolation Hospital at Southmead" was, in the early part of the year, reserved for the isolation of Small Pox, but was not so required. In the beginning of May it was opened for the reception of Diphtheria"... these were all discharged by the 10th June, when the Hospital was disinfected and used for one case of Scarlet Fever. . . . The steam disinfector . . . "answers its purpose well."

CAMPDEN RURAL DISTRICT.

Dr. Findlay reports: "Nothing has been done in the "matter of providing a permanent Isolation Hospital for "the District during the year. If there had been a Hospital "into which the earlier cases of Scarlet Fever could have "been moved I do not think there would have been so many "cases in the town as there have been. Probably the best "way would be for the Council to come to some arrangement "with the neighbouring Councils by which cases could be "removed to their Hospitals if required. It is much more "economical to nurse a number of cases together than to "keep up an establishment for only a few cases." (In 1896 the Sanitary Committee suggested that a Hospital might be established at Moreton-in-the-Marsh for the joint use of this District and the Urban and Rural Districts of Stow-on-the-Wold, for which no Hospital accommodation has been provided.)

CHIPPING SODBURY RURAL DISTRICT.

(The Hospital for this District was enlarged by erecting a railway contractor's office near the old Hospital.) Dr. Bond says: "I am obliged again to emphasise the fact that "this increase of ward accommodation—useful as it would be "in such an emergency as may at any time overtake the "District—will not be of any practical use unless "additional administrative resources are provided for "disinfection, storage of food, closet accommodation, laundry "work, mortuary and other purposes. The improvement, "also, of the approach to the Hospital—to which I have "more than once called attention—is of first importance, as "it is really not fit for use in a wet season."

DURSLEY RURAL DISTRICT.

(A site was bought some years ago, but no action has been taken to provide a permanent Hospital, one difficulty, apparently, being the question of a water supply.)

EAST DEAN RURAL DISTRICT.

Dr. Bond says, with reference to this District: "The "course most in the interest of the District would be to "retain the Green Bottom Hospital exclusively for cases of "Small Pox, and to provide an Isolation Hospital for general "purposes in the immediate neighbourhood of Cinderford, "where its position would render it available for the whole "of the District, and much more suitable for administrative "purposes and use than are either of the two existing "structures."

GLOUCESTER RURAL DISTRICT.

Dr. Bond says "a reply (to a communication from the "Rural District Council) was received, intimating that the "subject would receive the consideration of the City Council, "and that meanwhile the previous arrangement might be "considered as still operative." This "arrangement" is that patients would be admitted to the City Hospital from the Rural District at a charge of two guineas a week for each patient.

LYDNEY RURAL DISTRICT.

"As there are only two wards to the Hospital, it was unavoidable to receive a case of Enteric Fever, for which treatment in Hospital was very expedient, in a ward with a child convalescing from Scarlet Fever."

WARMLEY RURAL DISTRICT.

Dr. Murray again draws attention to the futility of the present agreement by which cases can be removed to the Keynsham Isolation Hospital owing to inaccessibility and defective administrative arrangements, and says "taking all "these inconveniences—which are real, not fanciful—into "consideration, it seems to me that a junction with "Kingswood would be our best move. I drew up a Report "on what we wanted, along with Dr. Perrott, M.O.H. for "Kingswood, and there was some activity shown by both "Councils in the matter but the activity "has passed into passivity."

WHEATENHURST RURAL DISTRICT.

Dr. Watters has reported on various sites, and considers that "if the Rural District Council could come to some "agreement with the Stroud Joint Hospital Board whereby "cases occurring in the Wheatenhurst Union of Scarlet "Fever or Diphtheria requiring Hospital treatment could be removed into the new Infectious Hospital at Cainscross, then our existing Isolation Hospital might be removed to a "new site (within, say, half a mile of the Workhouse), as "suggested, and used solely for Small Pox cases."

But little use appears to have been made of the Isolation Hospital Accommodation provided in the following Districts:

.. 16 cases of Scarlet Fever .. 1 removed Barton Regis Chipping Sodbury.. 47 do. do. do. Cirencester .. 41 do. do. ..11 do. .. 46 do. do. do. Lydney ..12 Diphtheria..11 East Dean ..140 do. do.

BACTERIOLOGICAL DIAGNOSIS.

In my Report for 1902 I drew attention to the importance of early diagnosis in preventing the spread of infectious diseases and to the value of bacteriological examinations in attaining this in the case of certain diseases.

In July, as a temporary measure, a letter was sent to the District Councils in the County recommending that they should make arrangements to have such examinations made at the cost of the Councils. Several of the Local Authorities made such arrangements. In December the matter was further considered by the Sanitary Committee, and, on their recommendation, the County Council resolved to enter into an agreement with Professor Stanley Kent, of University College, Bristol, to make examinations of specimens sent to him by any registered Medical Practitioner in the Administrative County. This agreement includes the following:—

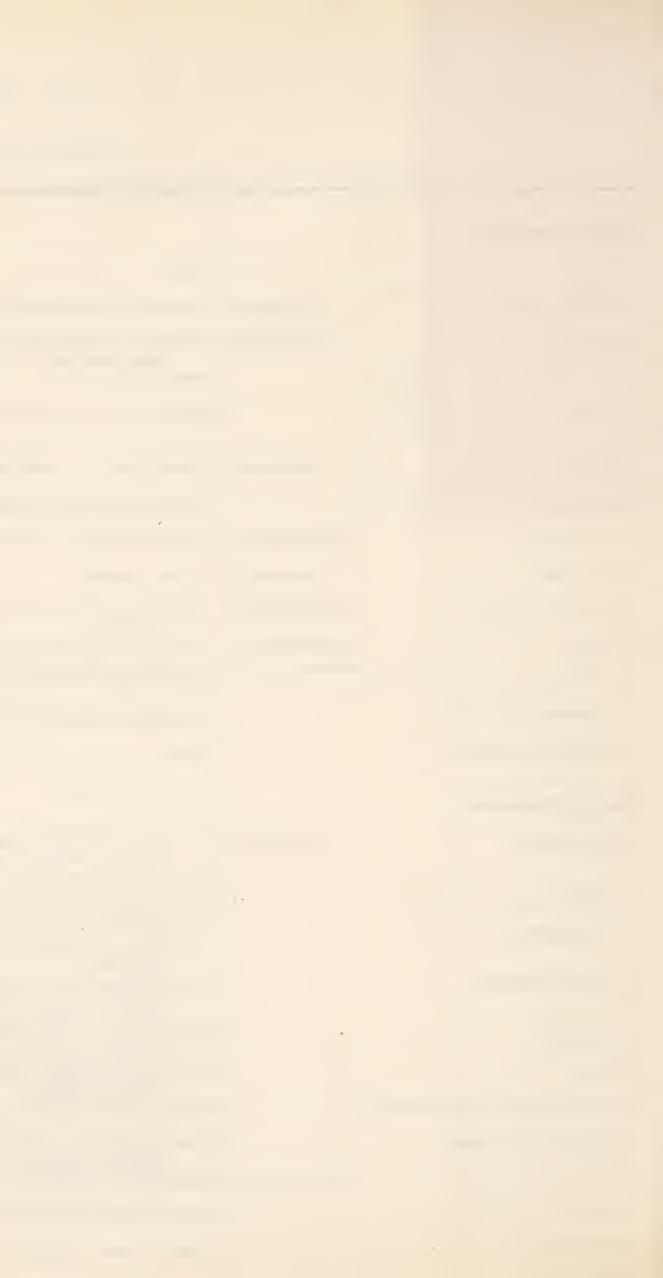
- 1. Serum test for Enteric Fever.
- 2. Bacteriological diagnosis of Diphtheria specimens from:
 - (a) Suspected cases.
 - (b) "Contacts" with known cases.
 - (c) Patients for the purposes of "control" at the termination of cases.

As soon as the details of working this scheme were finally settled, I sent a circular letter to all Registered Medical Practitioners in the County informing them of the arrangement, and explaining that the outfits could be obtained from the Medical Officers of Health for the various Districts, and that the results of the examinations would be sent by

TABLE XIII. (CONTINUED). ISOLATION HOSPITAL ACCOMMODATION

RURAL DISTRICTS.

DISTRICT,			GENERAL DISEASES.		SMALL-POX,				
			Situation.	No. of Beds.	Situation.	No. of Beds.	Disinfector.	GENERAL REMARKS.	
Barton Regis			Southmead (iron)	16	0		Steam, at Workhous	Wald for Dilli	
Campden			None		0		None	Hospital. Hospital.	
Cheltenham			Arrangement with Delancey				None	4 heds at Moreton Cottage Hospital for Moreton and Batsford: Hospital teuts at Todenham for Small-Pox. Medical Officer of Health suggest joining with neighbouring Districts.	
Chipping Sodbury	٠		Hospital Chipping Sodbury Common	8	0		None	Medical Officer of Health says steam disinfector wanted.	
Cireneester			Cirencester	12	South Cerney	2 Cottages	Gas, antiquated	Enlarged 1904 hy a new iron and wood block, but ambulance, disinfector &c., wanted, and the approach needs improvement. Inefficient in its present condition.	
Dursley	• •		The Moors, Coaley	4	0		Noue	Land for Hospital bought at North Nihley, 1901, but nothing done.	
East Dean and U	nited Par	ishes	Green Bottom, Littledean	12	0			The state of the form Nimey, 1901, not nothing done.	
Faringdon	••	٠.	2 Berthon Huts		o		None		
Gloucester			2 Cottages at Lechlade Arrangement with Gloucester City		Longford				
Lydney			Hospital (Highnam)	12	0)		
Marston Sicca		٠.	Stratford-on-Avon (joint)	20	Belle Vue (iron)		Washington Lyons		
Newent			Oxenhall	7	0			Y	
Northleach			Near Northleach	12	0			Used for Small-Pox, 1903.	
Pehworth			Evesham (joint)	24		••	Recks	Disinfector wanted.	
Stow-ou-the-Wold			Noue		0		10ecks		
Stroud			Cainscross (joint)	44	Bisley (iron)			Tent for Small-Pox jointly with Urhan District. Hospital for General Diseases needed.	
Tethury			None			12	Goddard, Massey and Warner	Hoped will be ready July, 1904.	
Tewkesbury	.,		Fradington	10	0	••	••		
Thornhury			None	12			••	Arrangement with Tewkeshury Borough to use respective Hospitals for Small-Pox and general Infectious diseases.	
Warmley		• • •			Farm House			Land purchased several years ago hut no building erected.	
West Dean		• •	Keynsham (joint)	6	0			Inaccessible: joint report with Medical Officer of Health to Kingswood	
			None		0			Urhan District in 1902. Joint District constituted by County Council, 1901.	
Wheatenhurst			Eastington	8	0			Medical Officer of Health suggests arrangement with Strond for general	
Winchcombe	••	• •	Langley Hill	4	0			infectious diseases, and has reported on sites for Small-Pox Hospital. Used for Small-Pox, 1904.	



letter, or, if desired, on prepayment of the trunk line charges, by telephone; and, if this was not available, by telegram, when a stamped addressed telegraph form was enclosed with the specimen.

Since this arrangement was made the Administrative County has been exceptionally free from Diphtheria and Typhoid Fever, so that no extensive use has been made of this concession up to the present time.

COUNTY NOTIFICATION.

Returns of the cases notified in the various Districts in the County are sent to me by the Medical Officers of Health, including notifications received up to Saturday in each week. From these Returns I prepare a Summary Sheet of the total notifications in the County, showing the numbers in the several Districts, and a copy of this is received by each Medical Officer of Health on the morning of the following Wednesday. By this means they have early information of the prevalence of infectious diseases in the Districts surrounding their own.

WATER SUPPLY.

A summary of the present condition of the Administrative County in the matter of water supply is given in Table XIV. From this it will be seen that Horfield Urban and part of Barton Regis Rural District are supplied by the Bristol Water Company (which draws its water from the Mendip Hills), and Kingswood Urban and Barton Regis (in part), Chipping Sodbury, Thornbury and Warmley Rural Districts by the West Gloucestershire Water Company which draws

its water from a disused iron mine at Coalpit Heath. The Stroud Water Company, which obtains its water from a well near the head of Chalford Valley, supplies the Nailsworth Urban and parts of the Stroud and Wheatenhurst Rural Districts, and supplements the supply of the Stroud Urban District. The other general supplies are local, and have in many cases been provided by the munificence of private persons.

There is evidence in the Annual Reports of the Medical Officers of Health for 1903 of considerable activity throughout the County in providing the various districts with a supply of water, though there would appear to be many parts of the Rural Districts in need of a good supply. The heavy rains during the year are said to have rendered many of these local supplies more abundant in their yield than for many years, and in many places where scarcity has before been the complaint, plenty of water was available.

New works were completed during 1903 for Lydney, Upper Slaughter (Stow-on-the-Wold Rural District), and Kemerton (Tewkesbury Rural District). The mains of the West Gloucestershire Water Company were extended to Little Badminton and Petty France (Chipping Sodbury Rural District), Didmarton (Tetbury Rural District) and Almondsbury (Thornbury Rural District). Boring operations were in progress at Circnester and Coleford; the former has resulted in increasing the yield to 15,000 gallons an hour, by which a constant service of water will be available for the town of Circnester, but the latter failed to discover sufficient water at a depth of 300 feet and the work was stopped in March, 1904.

Application has been made to the Local Government Board for loans for providing supplies of water for Chipping Campden (Campden Rural District) and for Beckford (Winchcombe Rural District).

With respect to places the water supply of which was not satisfactory in 1902, the following references are made in the Reports for 1903:—

URBAN DISTRICT.

Coleford.—Boring at Birchamp Wood, unsuccessful.

RURAL DISTRICTS.

CAMPDEN.

Chipping Campden. — Local Government Board Inquiry into application for loan of £4,500.

Moreton-in-the-Marsh.—Scheme for taking water from Bourton Wood abandoned, now proposed to obtain water from Great Wolford.

Bourton-on-the-Hill.—Waiting till the supply to More-ton-in-the-Marsh is settled.

CHELTENHAM.—Nothing done.

Dursley.—Well at North Nibley now a success.

East Dean.—Proposal to make additional headings in the well at Green Bottom.

MARSTON SICCA.

Long Marston—Nothing done.

NEWENT.

Newent and Bran Green—Nothing done.

STROUD.

Painswick—Scheme prepared.

Horsley and Woodchester—Notice given to the Stroud Water Company that if they do not supply these villages within six months, the Council will proceed to provide a supply.

SEWERAGE AND SEWAGE DISPOSAL.

In very few Reports is no mention made of this branch of sanitary work: in many, good progress in improvements is reported. Schemes for sewerage and sewage disposal works were completed during 1903 in Kingswood and Newnham Urban, and in Stroud, Tewkesbury and Winchcombe Rural Districts, and work in connection with the sewerage of Dursley and Cam was begun. It is disappointing that serious defects should be found in the new sewers provided in the Gloucester and Lydney Rural Districts so soon after the work was carried out. In such cases it is economy in the long run to expend a little more money in supervising the work of the contractor than to have the cost of doing his work over again after he has given up charge.

In other Districts extensive schemes are being prepared to remedy nuisances that have been complained of year by year—Kingswood and Nailsworth Urban, and Campden, Chipping Sodbury, Stroud and Tewkesbury Rural Districts.

The following is a short summary of the chief points mentioned in the Annual Reports:—

URBAN DISTRICTS.

- Charlton Kings.—Many new flushing boxes provided.
- CHELTENHAM BOROUGH.—Number of old sewers require renewal. The work has been done in two Districts.
- Coleford.—The District is still without a much-needed system of sewerage and drainage.
- Kingswood.—The section of the scheme dealing with Kingswood proper is nearly completed. A new scheme is being prepared for Hopewell Hill, New Cheltenham, &c., as the Local Government Board declined to sanction the scheme formerly proposed.
- Nailsworth.—Plans have been prepared for sewerage and sewage disposal works for the whole District.
- NEWNHAM.—Works practically completed.
- Tetbury.—Appreciable improvement at the outfall works, and the effluent has not been the cause of any complaint.
- Tewkesbury.—Large number of water closets still hand-flushed.

RURAL DISTRICTS.

- Barton Regis.—The drainage of Filton and Frenchay will require attention sooner or later.
- CAMPDEN.—Plans for Moreton-in-the-Marsh are before the Local Government Board. A Local Inquiry was held on this matter so long ago as 1896.

- CHELTENHAM.—Unsatisfactory results obtained at the sewage farms. Any future scheme should have disposal works for bacterial purification of the sewage.
- Chipping Sodbury.—Plans prepared for Wickwar. Now waiting for Local Government Board to hold a Local Inquiry.
- CIRENCESTER.—General wet weather has been favourable to the maintenance of a satisfactory effluent. No complaints received from Thames Conservancy with regard to Stratton or Fairford.
- Dursley.—Work begun for Cam and Dursley. Some improvement in sewers of Wotton-under-Edge.
- East Dean.—Some complaints of Cinderford outfall works. Nothing done to abate the nuisance at Littledean Hill.
- FARINGDON (LECHLADE).—No complete system.
- GLOUCESTER.—Pressing need for improvement of drainage of Churchdown. Defects found in new sewers of the Sandhurst portion of the North End system.
- Lydney.—Defects in new sewerage system at Lydney rectified. Urgent attention required with regard to sewerage of Mount Pleasant.
- Stroud.—Cainscross and Rodborough completed and Thrupp nearly finished. Plans prepared for Painswick, and for Woodchester.

Tewkesbury.—Scheme for Kemerton completed. A fourth scheme proposed for Ashchurch, now awaiting the sanction of the Local Government Board.

THORNBURY.—Nothing done, and no pressing need.

Warmley.—Large number of hand-flushed closets.

Many houses drain to brooks.

Winchcombe.—Considerable progress made in arrangements for Beckford. Bishop's Cleeve is still occupying the attention of the Local Authorities.

LISSEN DRAINAGE.

Mr. Dening, in his Report on the Stow-on-the-Wold Urban District, says: "The house drains, which receive the "waste water and daily waste are mostly connected with a "catch pit by the means of covered drain pipes, these catch pits being as far from the house as possible, and in most instances connected with a swilley, or fissure in the rock, which are so easily found in the District."

This connection of drains with cracks in rocky structures cannot be regarded as other than a most dangerous custom, for, though possibly no direct and observable mischief may be caused by thus polluting the underground water, the possibility of serious results ensuing is by no means remote. Whether the water supply of Stow itself is contaminated by this custom I am not in a position to say, but, as the well supplying the town is 130 feet deep, it would seem possible; and it would appear to me that it is worth while considering whether this may not explain the cases of Typhoid Fever, the causes of which could not be traced.

I would commend the Bye-Law with respect to Lissen drainage given on page 29 of the County Summary for 1902 to the consideration of the Stow-on-the-Wold Urban District Council.

RIVERS POLLUTION.

Dr. Bond remarks in the Introduction to his Report on the Combined District:—

"The excessive wetness of last year probably explains the absence of any serious complaints from localities where they have in drier years been more or less frequent."

In connection with the chief complaints on this subject recorded last year, some action appears to have been taken by the District Councils concerned, mention of which is made in the section dealing with "sewerage."

SCAVENGING.

So far as can be gathered from the Annual Reports, there has been no change in the arrangements made for public scavenging in any of the Districts. In some cases, where it is not already undertaken, the Medical Officers of Health advise that it should be done by the District Councils, and there can be no doubt but that this course is advisable in all places where there is any aggregation of buildings, and where the gardens are not generally large enough for the deposit of refuse without causing nuisance.

HOUSE ACCOMMODATION.

Reference to this important subject is made in many Reports, but by no means all. Dr. Bond quotes the following paragraph from the Summary of the Census Returns for the County of Gloucester:—

"The total number of separate tenements in the "Administrative County, together with the County Boroughs, "which had been 142,677 in 1891, rose to 156,765 in 1901, "the increase being equal to 9.9 per cent. Of this total the "tenements containing five or more rooms increased from " 78,404 to 100,176, equal to 27.8 per cent., while those with "fewer than five rooms decreased from 64,273 to 56,589, "equal to 12.0 per cent. Stated in another way, the "Tenements with five or more rooms were equal to "55.0 per cent. of the total Tenements in 1891, and "increased to 63.9 per cent. at the recent Census, while "the percentage of Tenements with fewer than five rooms "declined from 45.0 to 36.1. A marked decrease is shown "since 1891 in the number of one, two, three and four-"roomed Tenements in which more than two persons per "room were enumerated. Thus the number of one-roomed "Tenements, each containing more than two persons "decreased from 940 to 420; the number of two-roomed "Tenements, each containing more than four persons, from "1,809 to 892; the number of three-roomed Tenements, "each containing more than six persons, from 1,994 to "1,317; and the number of four-roomed Tenements, each "containing more than eight persons, from 1,315 to 969.

"In the aggregate of Urban Districts the proportion of "Tenements with fewer than five rooms to the total number "of Tenements is 32.9 per cent., and in the aggregate of Rural Districts it is 42.4 per cent." Dr. Bond adds: "Although these figures show a satisfactory and steady improvement in the standard of habitability of house accommodation for the working classes generally, they indicated a decline of such accommodation in the Rural Districts which is very serious."

Dr. Garrett gives a most interesting account of this question, in which he deals with the financial side of the subject, and then remarks, "Another feature in the case "must not be overlooked, and that is that the condition of "the houses of the poor is only a reflex of the condition of "the people themselves. The main cause of poverty is "comparative incompetence, or defect of character, which "appears to be natural or congenital. I should say that "much more than half of the evils pertaining to the homes "of the poorest poor is due to neglect of cleanliness, dirty "habits, incapacity to keep a house respectably. However, "these personal deficiencies are likely to always be seen at "their worst in the house that is too small." He describes how the Great Western Railway Company, in making an extension through a part of Cheltenham, propose to pull down 68 houses of a rental of about 3s. 6d. a week, and erect only 42 houses in their place at a proposed rental of 6s. a week—a higher rent than the displaced families can afford to pay.

An important Act was passed during 1903 dealing with the housing of the poor—the Housing of the Working Classes Act, 1903—the chief provisions of which are:—

1. An extension of the maximum period for which money may be borrowed by Local Authorities for this purpose, from 60 to 80 years.

- 2. The requirement that when persons of the working class are displaced under Parliamentary powers by public companies, School Boards, and in the course of certain kinds of public improvement the displacing authority shall not acquire more than a prescribed number of houses occupied by the working class people, unless they have provided for re-housing, and obtained approval of their scheme.
- 3. An amendment of the principal Act, so that it is not now necessary to serve a notice for abatement of nuisance before obtaining a closing order if the Local Authority is of opinion that the house cannot be reasonably made fit for human habitation, or that it is in such a state that its occupation should be immediately discontinued.

DAIRIES.

The control of the milk supply with a view to ensuring that the business is carried on under cleanly and healthful conditions is dealt with by some of the Medical Officers of Health in their Reports for 1903, but the subject does not receive that attention generally which it deserves. Dr. Bond remarks in the introduction to his Report to the Combined District: "When the owners of dairy farms can "be got to see that if they devoted the large sums which many "of them expend on sport to providing their tenants with "premises in which the manufacture of milk can be carried "on as satisfactorily as the requirements of cleanliness "and health demand, there will be much less excuse than "there is at present for the attempt which is so often made

"to manufacture milk under conditions which are absolutely incompatible with the production of an unpolluted foodstuff."

Later, in his Report on the Tetbury Rural District, Dr. Bond describes how, on the Cotteswold Hills, milk has taken the place of barley in being depended on to pay the rent.

Regulations with respect to these places under the Dairies, Cowsheds and Milkshops Order, 1885, appear to have been adopted in only 3 Urban and 6 Rural Districts in this County.

FACTORY AND WORKSHOP ACT, 1901.

All the Medical Officers of Health include sections in their Report dealing with the administration of the Factory and Workshop Act, 1901, by which Act more work has been thrown on Sanitary Officials in England than by any other Act of recent years. It gives important powers of supervision over all workshops and work-places, by which much can be done to ensure that they are kept in a cleanly state, and that wearing apparel is not made in any house whilst an inmate is suffering from Scarlet Fever or Small Pox.

BYE-LAWS.

The accompanying Table gives the Bye-Laws which are in force in the various Districts in the County. It will be noticed that building Bye-Laws are those most generally adopted, and that these are in force in all the Urban Districts but two, and in 14 of the Rural Districts, in whole or in part. Next to Bye-Laws with respect to New Buildings, those dealing with Nuisances and Slaughter-

Chartena Kings				ADVITAB!								TABLE XV.			
ARTE			Nuisances.	Lodging	Houses Let in Lodgings	Tents and Vans	New Streets and Buildings.	Slaughter Houses.	Dairies, &c.	Offensive Trades.	Cleansing o	Cleansing of Earth Closets,	Prevention of Cruelty to Children.	Allotments	
Chatchian Kings	URBAN DISTRICT	rs—													
Chettenham	Awre		. 0		0	0		*		0					
Cheltenham	Charlton Kings		1 .	0										0	
Circincester	Cheltenham										1			0	
Coleford	Cit.				0						1	0	0	0	
Horfield	0.1 ()								Ţ			0	0	0	
Kingsweed	TT 0.13			0							0	0	0	0	
Naisworth 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ving								0		0	0	0	0	
Newnham	NT 13						*		*	0	0	0	0	0	
Stow-on-the-Wold	N						0	0		0	0	0	0	0	
Strond							*	1	0	0	0	0	0	0	
Tetbury 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							0	0	0	0	0	0	0	0	
Tewkesbury				•			*		0	0	0	0	0	0	
Westbury-on-Severn			0	0	0	0	*	*	0	0	0	0	0	0	
RURAL DISTRICTS— Barton Regis			***			***	*	?	?						
Barton Regis	westoury-on-Severn		•	0	0	0	•	0	0	0	0	0	0	0	
Campden	RURAL DISTRICT	S													
Campden	Barton Regis	.	*2	*2	0	0		*2	0	0	*2	*3	*	*1	
Cheltenham	Campden		0		0	0	0	0		0			0		
Chipping Soldury 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cheltenham		0	0	0	0		0	0					0	
Cirencester	Chipping Sodbury		0	0	0	0	*	0							
Dursley	Cirencester		0	0	0	0		0						0	
East Dean and United Parishes • • 0 0 0 • • • 0 0 0 0 0 0 0 0 0 0	Dursley		*1	*1	0	0	*1		0						
Faringdon	East Dean and United F	arishes	*		0									.0	
Gloucester	Faringdon		0	0	0		0	0						0	
Lydney *2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Gloucester		*				it.			1				0	
Marston Sicca	Lydney)	*2	0										0	
Newert	Marston Sieca		0				0		0				0	0	
Northleach	Newent							2		0				0	
Pebworth 0 0 0 0 0 0 0 0 0 0 0 0 0	Northleach		0	0				,					0	0	
Stow-on-the-wold 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dishmonth	1			1		•					0	0	0	
Stroud	d								0		0	0	0	0	
Tetbury 0	3						0		0	0	0	0	0	0	
Tewkesbury	(A) - 43						•	0	*	0	0	0	0	0	
Thornbury *3 *3 0 0 *3 *3 * 0 0 0 0 0 0 0 0 0 0 0				0	0	0	0	0	0	0	0	0	0	0	
Warmley							*							•••	
West Dean 0			1	1		0	*3	*3	•	0	0	0	0	0	
Wheatenhurst 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						+	*	•	•	0	0	0	0	0	
Winchcombe 0 0 0 0 0 0				0	0	0	*	0	0	0	0	0	0	0	
Winchcombe 0		• • • • • • • • • • • • • • • • • • • •		0	0	0	0	0	0	0	0	0 .	0	0	
	Winchcombe		0	0	0	0	0	0	0	0	0	0	0		



houses have been adopted most generally, while Regulations under the Dairies, Cowsheds and Milkshops Orders are in force in only 9 of the 37 Districts in the County.

SCHOOLS.

In my Report last year I drew your attention to the fact that there were considerations of health involved in the administration of schools which were not generally recognised, and I pointed out that there were three directions in which I considered action might be most usefully taken by the Education Committee. They were:—

- 1. The condition of the school buildings as regards health.
- 2. The condition of the children themselves.
- 3. Lessons in Hygiene.
- 1. With respect to the buildings, I understand that the Committee has had a Report made on all the schools in the County by their Surveyor.
- 2. As in the Annual Reports of Medical Officers of Health for previous years, so this year—numerous references are made to the influence of schools in the spread of preventable disease, owing to cases being unrecognised. To quote from the introduction to Dr. Bond's Report on the Combined District:—
- "In connection with the diffusion of Diphtheria, "especially through the agency of schools, there is good reason to think that the existence of an infectious discharge

"from the nose (infective rhinitis) is frequently, both in "children and adults, the forerunner of an attack of "Diphtheria. Children so affected can be generally easily "recognised, and should be excluded from school and their "noses well syringed daily with an antiseptic. "misfortune is that parents cannot in many cases afford to "call in a doctor to instruct them on this point and to "provide means for doing so; hence nothing is done. A "good trained nurse could very well deal with cases of this "kind, as well as with others of a similar nature, such as the "infectious forms of skin disease which are so troublesome "when they get into schools. We are doing a good deal to "provide for the instruction of the rising generation, but "outside the Metropolis and a few large cities we have "hitherto made little or no provision to protect the children "whom we compel to attend school from the insanitary "conditions to which they are so often exposed there. "is to be hoped that now the schools are placed under the "control of a less penurious regime this aspect of scholastic "life will receive more attention."

I myself early last year saw two children (who had just come straight home from school) in the later acute stages of mild attacks of Diphtheria. Scarlet Fever appears to have been spread in many Districts during the year by the attendance at school of mild unrecognised cases, a few such being fortunately discovered by the Medical Officers of Health.

In April I was given an opportunity of introducing this subject to the notice of the School Management Sub-Committee, and, at their invitation, I made another Report

to them in May, in the course of which I pointed out to what a large (but unknown) extent infectious conditions of the skin existed in, and how infectious diseases are spread by, schools, and I gave instances of what was being done in London and foreign countries to deal with this question. In this Report, as requested, I drafted a scheme of working for a part of the County as an experiment. this purpose, the Stroud District, with 44 schools, was suggested. At the last meeting of the Education Committee the recommendation of the Sub-Committee to try such a scheme in the Stroud District was confirmed. The proposal was that the medical man nearest each school should be appointed the Medical Officer for that school; that at the beginning of each year (or term, if thought advisable) he should examine all the children, and exclude from attendance at school those who were found to be suffering from any infectious or contagious condition; that complete records should be kept of all examinations, and copies of these should be sent by the teachers to the Education Committee; that during term time a teacher shall send any child who is suspected to be suffering from any infectious or contagious condition to the Medical Officer, or shall ask him to see the child at its home. The parents of all excluded children would be informed of the reason for exclusion, and in cases where steps are not taken to have the infectious conditions remedied, graduated pressure should be brought to bear on the parents to get them remedied. It must clearly be understood that this is in no way relieving parents of their natural responsibility; on the other hand, it throws responsibility on their shoulders, since all that is done is to draw their attention to conditions, to deal with which is their duty. In one or two Reports notes are made of a few other

ways in which something can be done to render school-life safer from this point of view, by giving up the use of slates, which may be the cause of the spread of disease by children spitting on them for the purpose of cleaning them, and by having the hair of all schoolgirls cut short, which would greatly diminish the risks of parasitic disease.

3. The third point in my Report last year was the subject of School Lessons in Hygiene. To the remarks I made on that occasion I would ask your attention.

MIDWIVES ACT, 1902.

At the Meeting of the County Council in July, 1903, the powers and duties conferred upon them by this Act were delegated to the Sanitary Committee, under sec. 9 of the The administration of the Act had already received the attention of the Committee, and in December, 1902, a list of the women practising as midwives in the County was obtained. On this list were the names of 426 women so acting, of which number—on further inquiry—229 were said to be practising habitually and for gain. In January, 1904, it was resolved to send a notice of the effect of the Act, together with a full abstract of the Rules of the Central Midwives Board to "persons at present using the title of "Midwife," as required by section 8 (7) of the Act, and I was appointed Executive Officer under the Act to undertake the general supervision of and investigation of charges against midwives and the carrying of the Rules of the Central Midwives Board into effect.

The notice and abstract above mentioned were sent early in the year to the 229 women who were said to be practising

as midwives habitually and for gain. That some of the remaining 197 women on the originial list are also practising habitually appears to be shown by the fact that a few of them have already applied to be registered by the Central Midwives Board, and that I have only discovered them from seeing their names in the provisional Rolls of Certified Midwives issued by the Board. Up to the present time (14th June, 1904) thirty women have sent me notices of their intention to practise in Gloucestershire, one of whom has since left the County. Two other women have written to say that they are not practising. I have received applications for Forms from women who have not as yet given notice of their intention to practise.

It appears to me probable that the Notice which has been sent to those women at present in practice as midwives has not, in many cases, been understood, and for this reason I think that it would be of assistance if another notice were sent to them explaining that they are given until the 31st March in next year to register, on the ground of having been in practice for one year prior to July, 1902, and that after that date they will not be placed on the Roll without passing an Examination.

One of the duties of the Local Supervising Authority is to inform the Central Midwives Board of the death of any certified midwife in their area. At the present time there is no means of our obtaining this knowledge; but I am informed by the Secretary to the Board that "the County "Council of Worcestershire are endeavouring to arrange "with the Registrar-General that the Local Registrars of "Deaths should send them a certificate of the death of any

"midwife within their area as soon as the fact occurs. This
seems to be the only effective way of ensuring that the Local
"Supervising Authority or the Board should have prompt
"notice of the death of a midwife, and it would be desirable
that such a course should be generally adopted by the
"County Councils."

I would suggest that application be made to the Registrar-General with a view to such an arrangement being made with the Local Registrars of Death in this County.

There has, up to the present time, not been occasion for any action on the part of the Local Supervising Authority under the disciplinary sections of the Act. Area 4,329 Acres. Population 1891 .. 1,148

1901 .. 1,096

Decrease 1891–1901 .. 52 (4.5 per cent.)

Estimated population 1903 .. 1,086

Medical Officer of Health . . F. T. Bond, B.A., M.D., F.R.S.E.

Dr. Bond says "this district is entirely rural in its character, "except in the case of the small town of Blakeney. I have myself "visited Blakeney and other parts of the District on different occa- sions during the year, and can report favourably as to its general condition and freedom from any serious defects."

"The only cases of septic disease notified during the year were two of Scarlet Fever at Blakeney. Such an almost complete immunity from notifiable disease in this district has not occurred since 1899, when there was not a single case."

There are 30 dairies, cowsheds, and milkshops registered in this District.

Dr. Bond summarises the Report of the Sanitary Inspector (Mr. W. A. Willetts).

Area 3,399 Acres. Population 1891 .. 2,995
1901 .. 3,806
Increase 1891–1901 .. 811 (27·1 per cent.)
Estimated population 1903 .. 3,880

Medical Officer of Health .. H. Bansall Todd, M.R.C.S.

Mr. Todd says: "Though the death rate is slightly higher than "usual, the general health of the District has been well maintained, "in spite of the inclemency of the weather, which has been wet and "cold, and sunless throughout the year."

Two of the four cases of Diphtheria—the only disease notified during 1903—occurred in one family, and were directly imported from a neighbouring District."

"The recommendations of the County Council as proposed by the "County Medical Officer of Health in respect to diagnosis of infectious disease by Bacteriological Examination have been adopted by you, and should prove of value to Medical Practitioners in all doubtful "cases."

"Many new flushing boxes have been supplied and the Corporation water laid on in place of inadequate supplies from pumps."

"The milk supply continues to be of the same excellence as in former years, every care being bestowed by the milk vendors upon their farms and cattle."

The Report of the Sanitary Inspector (Mr. B. Hack) gives details of places where new flushing boxes have been provided and the Cheltenham water laid on. The bakehouses are said to be "built" in accordance with the requirements of the Local Government "Board The brook running through Wood's "Nursery at the back of Lyefield Schools has been cleaned out and "the banks repaired."

Area 4,726 Acres. Population 1891 ... 47,121

1901 .. 49,439

Increase 1891–1901 .. 2,318 (4.9 per cent.)

Estimated population 1903 .. 50,500

Medical Officer of Health .. J. H. Garrett, M.D., D.P.H.

Dr. Garrett, in his twelfth Report, gives, in addition to the statistics for 1903 and details of work done during the year, a resumé of the chief statistics of the past 30 years, and also an extended review of one or two more important Public Health matters for the same period. In the introduction to his Report Dr. Garrett says:—

"During the twelve years which have elapsed since the Public "Health work of the Borough was set upon a more effective footing, "great changes have taken place in the sanitary conditions existing "here, as the result of genuine and persistent work; and it is "satisfactory to have evidence that this work has not been without "its good effect, for, even if we had not the marked improvement in "our health statistics to assure us of material beneficent results, the "improvements evident to sight and sense would themselves bring "a large share of satisfaction. I need only refer to the extension of "the water supply to practically every house, ensuring a thorough "flushing of all house drains and increasing the facilities for cleansing; "the improvements effected in the drainage of houses; also, in "respect of the smaller house property generally, the improvement "and up-keep of the houses and their surroundings, and the ridding "of the borough of some of those least fit for human habitation; "besides the many sanitary improvements, whether or not imposed "by new Acts of Parliament or Bye-Laws which have been "introduced or brought into effective utility during the period under

"Amongst the pros and cons of the year 1903 has to be placed the favourable death-rate (the most favourable ever recorded),

"and although in attaining this we are probably assisted by natural causes, inasmuch as Nature never before treated us so well, it may reasonably be claimed that this result was in part due to the improved sanitary conditions of the Borough."

The chief characters of the town are described—its reputation as a resort for water cure, as an educational centre, and as a residential town, its geology, physiography and climate all being fully considered.

Dr. Garrett estimates the population at 50,500, and points out that in Cheltenham there is a large excess of persons over the age of 55 years and of females, and a deficiency of persons under the age of five years as compared with the rest of the country. "These "differences are chiefly important in making comparisons of the "numbers of deaths here from causes affecting persons over 55 years "of age and from causes affecting men rather than women. Our "death-rate will consequently appear too high in comparison with "the death-rate of all England, or with that of many other towns, "from cancer, apoplexy, heart disease, etc."

The birth-rate was 21·3 per 1,000 (an increase of 2·3 on the rate for 1902, the minimum). The death rate was the lowest ever recorded (12·7). Dr. Garrett remarks on this, and adds:—"Last "year was an exceptionally favourable year in most places in "England, and the reason may still require full explanation; but "the peculiarity of the year was its extreme wetness. The death "rate for all England for 1903 was also a lowest record. The "excessively moist year means that both the air and the soil "received an unusual washing, the amount of disease-bearing dust "being reduced." Dr. Garrett then points out the most interesting fact that the saving in life between 1902 and 1903 occurred below the age of 5 years. "Deaths from pneumonia and bronchitis show "a falling off of about 50 per cent. as compared with previous years. ". . . . Respiratory diseases and measles are likely to be

"The number of deaths of infants under one year of age was 91, igiving a death rate per 1,000 children born of 85, which is by far the lowest on record with us, the average for the previous ten years being 137. Of these 91 deaths in young infants 23 were due to premature birth, many of these having had but a very brief existence, and 13 to debility and natural defects. There may be little to regret in regard to these deaths, but the same cannot be so readily allowed in respect of the 14 deaths from diarrhæa and enteritis, the 16 from tubercular diseases and the four infants who were suffocated whilst in bed with their mothers—or overlain, to put it in one word—a reprehensible error of too common occurrence amongst mothers."

"The death rate for the seven chief zymotic diseases was one of "of the lowest we have had, being for the year 57 per 1,000 living "inhabitants, against an average of 1.0 per 1,000 for the previous "ten years." Dr. Garrett then gives tables of statistics for the last 30 years, statistics for the six wards into which Cheltenham is divided, and a complete list of deaths in the various streets. "West Ward and Middle Ward have always shown the lowest death "rates; the North Ward generally the highest, though it has "sometimes been run close by the East and Central. But whilst "the lowest has been very low, the highest has never been very high." "The fact is that, although we have some very poor houses, there is "not that degree of over-crowding which is recorded in many busy "industrial towns. Our poorest streets (with only an exception "here and there in regard to some very limited bits) are widely built, "with ample air about them; and, although from time to time we "find people overcrowding a house (and if we sought for them

"particularly, could at any time find instances), overcrowding of the house by too many persons is not so common here as elsewhere." The North Ward has always the highest birth rate.

"In reviewing the thirty years' statistics of zymotic deaths, "what is chiefly to be noticed is not a gradual decrease in the numbers, "but an absence in the later years of the disastrous epidemics which "occurred in certain years at the earlier periods. Thus, latterly "we have nothing resembling the epidemic of scarlet fever which "overtook the town in 1876, causing 96 deaths; nor any epidemic "of Measles approaching in severity that of the year 1878, which "caused 87 deaths. When these years of severe epidemics are "excluded from the statistics, the number of deaths and the number "of cases occurring (since they have been notified) do not show any "surprising variation from year to year, which appears to indicate "that it is in the prevention of destructive epidemics that sanitary "measures have had the greatest effect upon the zymotic diseases." "whilst the liability to these diseases has remained. If each of "these diseases depends for its occurrence upon a living micro-"organism, as may now be safely averred, nothing could put an end "to the disease excepting the extermination of the organism, which "must be looked upon as quite an impossible thing; and therefore. "these diseases will remain, and from time to time, and in one place "and another, will increase or diminish according as local and general "circumstances favour their development or inhibition. "circumstances which we call insanitary favour their development, "such as accumulation of decomposable filth, impure food and water, "polluted air, and contact of the healthy with the sick. Of this it "may be said we have undeniable evidence, and as these are in large "measure within our management and control, the saving ourselves "from those local epidemics referred to, as well as those terrible world "scourges that find mention in history, must depend upon the "careful exercise of that knowledge to which it has taken us so long "a time to arrive. The result depends upon the behaviour of "individuals, and because individuals cannot be relied upon voluntarily to order their lives in such a way as shall ensure the best health for themselves and their neighbours, it is necessary for them to be constrained by compulsory laws. Only in that way is the united action of all in the common cause to be obtained."

One case of Small Pox occurred, probably caused by an occupant of the Tramp Ward. There were 65 cases of Diphtheria, with a greatly diminished case death rate, "partly due to treatment by "serum and partly due also to a large number of "cases that are now notified upon bacteriological diagnosis, in which "the symptoms are at no time severe." The number of cases of Scarlet Fever was below the average, and "the disease was again of "a mild type."

Dr. Garrett discusses "the obtaining of Local Powers by "promotion of Bills in Parliament" (more particularly in connection with the provisions for the safeguarding of the Public Health that were contained in the Cheltenham Improvement Bill which was rejected by the ratepayers), "Public Abattoirs and Private Slaughter "Houses, the History of a Thirty Years' Agitation; The Factory "and Workshop Act, 1901, and Underground Bakehouses; The "Question of Better Housing of the Poor; Public Sewers—Privately "Owned; The Hospital Isolation of Scarlet Fever, The "Bacteriological Diagnosis of Diphtheria, The Notification, Isolation "and Treatment of Phthisis," to which numerous references are made in the body of my Report, with full extracts.

The Report of the Chief Sanitary Inspector (Mr. A. E. Hudson) gives a very full and concise account of the work done in his department during the year. "No actual legal proceedings were "found necessary to enforce compliance of notices served." The provisions of the Factory and Workshop Act, 1901, which has made considerable alterations in, and additions to, the duties of District Councils, have been minutely attended to. Dr. Garrett remarks that

"the result of the Act, taken altogether, has been extremely "gratifying, the improvements effected being very marked." For the guidance of bakers a special Report was drawn up by Dr. Garrett setting forth the minimum requirements in "underground" bakehouses, and a copy was sent to each baker. It is also recorded that Corporation Sanitary Certificates were granted for 46 houses, and that during the year 104 yards and areas were newly paved.

Area 5,286 Acres. Population 1891 .. 7,521

1901 .. 7,536

Increase 1891–1901 ... 15 (0.2 per cent.)

Estimated population 1903 ... 7,555

Medical Officer of Health .. F. T. Bond, B.A., M.D., F.R.S.E.

Dr. Bond attributes the exceptionally high infantile mortality of 154 partly to the injudicious feeding to which infants are so often subjected.

No cases of Diphtheria or of Typhoid Fever occurred during 1903. There were 43 cases of Scarlet Fever, of which number 31, or 72 per cent., were removed to the Isolation Hospital. The disease was of a "very mild" type. Dr. Bond says "in the great majority "of the cases no definite clue could be obtained as to the source of "the infection beyond the fact that most of the children attended "the infant department of the Lewis Lane School," and discusses "the perplexity of the problem" of the advisability or otherwise of closing schools when this disease is prevalent. Dealing with the incidence of Scarlet Fever in this District, Dr. Bond says "we may be "sure that in three, or at most four, years we shall have another out-"break. Shall we prepare ourselves to meet it by providing not only "increased, but improved accommodation, for promptly isolating "those that may be attacked, and thus pursue a consistent policy in "this matter, or shall we fight the foe with one hand tied behind our "back, as it is practically at present?" Dr. Bond in his Report last year referred "to the inefficiency of the Hospital in its present condi-"tion to meet the requirements of the conjoined District," and said that "the premises as they now stand are really not more than is "required for administrative purposes in such an epidemic as we had "to deal with last year. The disinfector has for "some years fallen a good deal behind the present requirements of "sanitary science." He also during 1903 "brought this subject

"formally under the attention of the Hospital Committee at one of their meetings during the year, and can only reiterate his opinion that the time has come when the Rural and Urban Councils of Cirencester should consider the propriety of either enlarging the accommodation which the present Hospital affords, or of providing a new Hospital elsewhere."

Dr. Bond gives a most interesting account of the water supply of this town, and of the difficulties that have been met in the attempts to increase the supply. The old well taken over by the Council was 181 feet deep. The bore hole was protected and a more powerful pump put down, increasing the yield from 75 to 140 gallons per minute. It then became necessary to find more water, and a new well was sunk 21 feet from the old well, but only 1,000 gallons an hour could be obtained at a depth of 135 feet. Finally a new boring, $6\frac{1}{2}$ inches in diameter, was made from the bottom of the larger hole to a total depth of 267 feet, trouble being caused by the breaking of a drill. A yield of 15,000 gallons an hour has thus been obtained, "of a quality "which, according to the analyses of Professor Kinch, leaves nothing "to be desired." It appears that the town will have a constant service of water as soon as these works are completed.

Dr. Bond summarises the work of the Sanitary Inspector (Mr. T. Hibbert), and says: "I have at various times visited the slaughter-"houses, premises of milk sellers, bakehouses, and the single lodging-"house now existing in the town, and have found them generally in a "fair condition."

Area 2,067 Acres. Population 1891 .. 2,450

1901 .. 2,541

Increase 1891-1901 .. 91 (3.7 per cent.)

Estimated population 1903 .. 2,560

Medical Officer of Health .. P. Buchanan, M.B.

Dr. Buchanan says the District "is made up of the town itself "and outlying localities, viz., the Scowles, Crossways, Lower Berry "Hill, Mitcheldean, Broadwell and Coalway Lane Ends, Milkwall, "Whitecliff and Mill End, all (with the exception of Whitecliff and "Mill End) situated on a ridge more or less encircling the Town." He estimates that the population has slightly increased. The birth rate, which was 31·1 in 1902, fell to 26·0 in 1903; the death rate, on the other hand, has risen from 10·6 to 16·8, one of the highest in the County. The Infantile Mortality is also high this year—116. "The "chief cause of the increase was Measles and its complications, "which carried off 7, whose ages ranged from 6 months to 8 years."

There were 13 cases of Scarlet Fever, which was apparently spread by the schools. "There is no Isolation Hospital to which "first cases of infection can be sent with a view to averting an "epidemic; therefore the only means which can be adopted are "(1) to isolate the patient as far as possible; (2) to prohibit the "children (if any) from attending day or Sunday schools; (3) to "disinfect all excreta, etc., during the attack; (4) on recovery, "having closed all outlets, to fumigate with burning sulphur, to "remove all wall paper, and to quicklime, and finally to boil the "clothing, sheets, blankets, etc., all this being done under the "supervision of the Sanitary Inspector." These are all of them undoubtedly good measures, and the best that can be undertaken under such circumstances, but without proper means for isolation, which but rarely exist where the disease is most prevalent, it is not possible to effectively control the spread of certain infectious diseases. Later, in speaking of the water supply, Dr. Buchanan

refers to the two Reports by Dr. W. W. E. Fletcher (Medical Inspector of the Local Government Board)—the first in 1893 on an outbreak of Diphtheria, and the second in 1900 on an epidemic of Typhoid Fever—as a result of which the Inspector emphasised the necessity for the provision of an Isolation Hospital. Further reference to this subject will be found in the section dealing with Isolation "Hospitals."

Dr. Buchanan says "the District is still without a much needed "system of sewerage and drainage"; the attention of the Council has been called by him each year since 1898 to the unsatisfactory old stone drains discharging into the stream, and also by Dr. Fletcher in the Report referred to above.

The question of the Water Supply has not yet been solved; the boring in Birchamp Wood failed to discover sufficient water, and operations were stopped in March last. The provision of a Joint Isolation Hospital for this District and the West Dean Rural District (under the Order of the County Council, 1901) was "deferred "until some definite arrangement is arrived at with reference to the "Coleford Water Supply" (Report of Sanitary Committee, January 12th, 1903). See also page 38.

In view of what has happened and the numerous Reports made on the very unsatisfactory state of affairs, it would appear to be a matter of some urgency that definite improvement in these conditions should be obtained by the Council.

Dr. Buchanan also reports that the usual inspections of the Slaughter Houses, Bakehouses, Dairies, etc., have been made.

Area 832 Acres. Population 1891 ... 645

1901 .. 1,435

Increase 1891–1901 .. 790 (122.5 per cent.

Estimated population 1903 .. 1,550

Medical Officer of Health .. A. W. Peake, M.R.C.S.

"This District comprises that portion of the upper part of "Horfield, excluded by Bristol under the Boundaries Extension "Act of 1897." It contains 292 houses, with the addition of the Barracks.

There has been no change in the supply of water, which comes from the Bristol Water Company's Works.

With the exception of 14 isolated cottages and farms, all the sewage is water borne; the new arrangement at the Disposal Works has removed grounds for "complaints which were constantly "being received from householders in the neighbourhood."

There are no noxious trades and no bakehouses in the District. The dairies are 10 in number. Mr. Peake proposes to "invite the "farmers in the District and others engaged in the milk trade to a "Conference with a view to securing greater cleanliness to cowsheds, "etc."

The birth rate (33.5) is the highest in the County, and the death rate (9.0) the lowest. The arrangements for isolating cases of infectious disease are the same as last year: two beds are reserved for Horfield in the Iron Hospital erected by the Barton Regis Rural District Council at Southmead. There is no provision for Small Pox, and Mr. Peake emphasises the need of some action being taken in his words of last year: "There remains the further question of "dealing with Small Pox which demands your prompt and careful "consideration. As the Local Government Board Regulations "forbid the use of a Hospital for Small Pox and other infectious."

"diseases at the same time, the arrangement with Barton Regis "would not enable us to send any case there. You are, therefore, "faced with the responsibility of finding some place for this "purpose, and all arrangements should be made beforehand, so that "if the emergency arise isolation can be ensured without delay. In "no disease is immediate isolation so necessary as in Small Pox. I "suggest that you open negotiations with Barton Regis to this end."

Mr. Peake records a most interesting, but most unfortunate, outbreak of Typhoid Fever. In connection with this outbreak eight persons suffered, and two died. One case was that of the woman who nursed the first patient. Seven people lived in the house, where the bedding and clothes of the first case were washed, and only two escaped having the disease—the father, who had had the disease previously, and an infant of 16 months. It appears that the cause of the cases in this house was the pollution of their well water by the water in which the soiled clothes were soaked, the well presumably not being properly protected against the inflow of surface water. The well was closed—after chemical examination of the water—on a magistrate's order, but the house is no longer to be used as a dwelling-house.

The prevention of Consumption has also been occupying the attention of Mr. Peake, who has had an instructive leaflet left at every house, and arranged for special visiting by members of the Bristol Corps of the St. John's Ambulance Brigade at infected houses, with lady helpers, in conjunction with a similar scheme in Bristol, advice being given, and Dettweiler's sputum flasks supplied gratuitously. Also the Council has made arrangements whereby Professor Stanley Kent, of University College, Bristol, examines suspected sputum bacteriologically, free of charge.

Area 1,525 Acres. Population 1891 .. 9,114

1901 .. 11,961

Increase 1891–1901 .. 2,847 (31·2 per cent.)

Estimated population 1903 .. 12,361

Medical Officer of Health ... C. J. Perrott, L.R.C.P., I.

Mr. Perrott says that "the efforts which were made to get Bristol" to include Kingswood in their extension scheme having fallen "through, there is now no likelihood of any change for some years."

The birth rate increased from 26.8 in 1902 to 31.0 in 1903, while the death rate fell from 14.4 to 13.4, and the infantile mortality from 141 to 89. "This exceedingly low rate is unprecedented in our "infantile mortality returns."

There was a great increase in the notifications of cases of infectious disease, from 173 in 1902 to 245 in 1903. Fifty-two cases of Diphtheria were notified, with seven deaths, antitoxin being used in all severe cases. "The schools where most of the cases arose were "frequently inspected," and swabs taken from the throats of doubtful cases for bacteriological examination. Mr. Perrott refers to the length of time—even for months—during which the diphtheria bacilli may persist, and is of opinion that this is one of the difficulties in stamping out the disease. Scarlet Fever was very prevalent, 148 cases being notified, with 9 deaths; the chief schools affected were the Wesleyan Schools at Hanham and Kingswood, the same at which most cases of Diphtheria occurred. Mr. Perrott says the spread of this disease was caused chiefly by unrecognised cases, though "an Isolation Hospital would have been invaluable in the "early stages, when the number of cases was small."

[&]quot;Very little has been done during the year as regards the securing of an Isolation Hospital."

Since the joint Report made in 1902 by Mr. Perrott and Dr. Murray (Medical Officer of Health to the Warmley Rural District Council) on the requirements of a joint Hospital for the two Districts—the result of a unanimous memorial from the medical practitioners to the two Councils—Mr. Perrott has visited two sites, and reported on the cost of erecting and maintaining a Hospital in the Kingswood Urban District. He again urges the "great necessity of securing an Isolation Hospital," and suggests as a temporary measure that the Council should rent a couple of isolated cottages which could be used meantime for Scarlet Fever and Diphtheria.

"The West "Gloucestershire Water Company's supply is now "laid on to nearly all the houses in the District and "has been ample to meet all requirements. Fifty-five new houses "have been connected during the year."

With respect to the sewerage and drainage, Mr. Perrott reports that the scheme dealing with Kingswood proper, Moravian Road, Potter's Wood, Hanham Road, Court Road, Foot's Hill, Hanham and Jefferies Hill has almost been completed, though he does not anticipate that the outfall works at Conham will be finished for another three months. Another scheme is being prepared to deal with Hopewell Hill, New Cheltenham, Warmley Hill and Warmley at an estimated cost of £11,000, in place of that which was not approved by the Local Government Board in 1902, owing to a failure to take in Deanery Road; the new outfall works proposed are near Warmley Tower Pond, in the Warmley Rural District.

Mr. Perrott considers that the house to house removal of refuse started last year "has been a great assistance in checking the spread "of disease."

Mr. Perrott states that he has "been asked by the Local" Government Board to make sub-divisions of the District," but that this is impossible, unless he is supplied with fuller particulars by the Registrar. These sub-divisions of Districts are very useful,

and, with the evidence accumulated in the course of years, invaluable information is obtained as to the local distribution of disease and indications given of the directions in which the action of Councils would be most helpful.

Printed with Mr. Perrott's Report is that of the Sanitary Inspector (Mr. C. H. Waithman, Cert. San. Inst.), which, besides giving details of the sanitary work done during the year, includes a short Special Report on the administration of the Factory and Workshop Act, 1901.

Area 1,597 Acres. Population 1891 ... 2,993
1901 ... 3,028
Increase 1891–1901 ... 35 (1·2 per cent.)
Estimated population 1903 ... 3,035

Medical Officer of Health .. J. Middleton Martin, B.A., M.D., D.P.H.

"Inspection of the house accommodation in the District has been made as time and opportunity allowed, but, though improvements are required in various parts, it has not been found
necessary to call your attention to any special houses during
the year."

With respect to Sewerage and Drainage, G. P. Milnes, Esq., Assoc.M.Inst.C.E., was instructed to prepare all plans, etc., for a complete scheme for the District, the cost of which he estimates at £13,000; it was resolved to make application to the Local Government Board for permission to borrow this amount. Attention is again drawn to the danger of contamination of the sub-soil and underground water by the privy midden, so common in this District.

The local water supplies have been rendered more abundant in their yield by the heavy rains of the past year; the attention of the Council has been called to the necessity of the more careful protection of these supplies from contamination. The number of connections with the Stroud Water Company's mains is now 275, an increase of 14 on the number in 1902.

Slaughter-houses still require improvements before they can be considered really satisfactory. Milk is often kept under unsatisfactory conditions as to the vessels and surroundings.

Two of the bakehouses have been greatly improved. The number of workshops on the register is 12.

Bye-Laws with respect to Nuisances and New Buildings and Regulations with respect to Dairies, Cowsheds, and Milkshops have been adopted in the surrounding Rural District, and it is hoped that these, together with Bye-Laws with respect to Slaughter-houses, will be adopted in this District. A Committee of the whole Council has been appointed to consider the matter.

The number of notifications of cases of Infectious Disease was 16, of which 14 were cases of Diphtheria. It is noted that since 1898 cases of this disease have occurred every year. As a result of the letter issued by the County Council to the District Councils in the County, this Council made arrangements with W. Washbourn, Esq., M.R.C.S., of Gloucester, to make bacteriological examination in suspected cases of Diphtheria and Typhoid Fever.

The birth rate (27.0) is the highest since the formation of the District in 1894, and the death rate (13.8) is the lowest. The latter, when corrected for the age and sex distribution of the population, is 12.3. The Infantile Mortality was 98. The death rate from Cancer for the 10 year period (1891–1901) was .90, while that for the whole of Stroud Union was .80. This higher rate is probably to be accounted for by the fact that in Nailsworth there is a large excess of females at all ages over 25 as compared with the whole Union. For Tubercular Diseases and Pneumonia Nailsworth has comparatively low death rates.

NEWNHAM URBAN DISTRICT.

Area 1,937 Acres. Population 1891		1,401
1901	• •	1,184
Decrease 1891–1901		217 (15.5 per cent.)
Estimated population 1903		1,140

Medical Officer of Health .. F. T. Bond, B.A., M.D., F.R.S.E.

Dr. Bond remarks that, "It is a singular thing, to which I have "more than once drawn attention in previous Reports, that a town so "picturesquely situated as Newnham is, with such good sanitary "conditions as it enjoys, and such an excellent railway service as it "possesses, should exhibit so little progress in the way of residential development. Not a single new house, so far as I am aware, has been built in the District for some years—not, certainly, for want of admirable sites on which to build, but, apparently, from lack of the enterprise which is necessary to utilise to good effect the advantages which Nature has so bountifully provided."

Three cases of Scarlet Fever and one of Erysipelas were notified during 1903. Dr. Bond says: "Whilst the sanitary record of the "year presents little that goes to make history, it also offers little, "except the absence of any provision for isolating a case of infectious "disease, to which I have so frequently drawn attention, that calls "for serious reflection."

The water supply continues to be satisfactory. "The great event "in the sanitary history of the year has been the commencement of the scheme for the improvement of the drainage of the town, designed by Mr. Fitzgerald Jones, of Gloucester. This, at the time of writing this Report, is practically completed."

A summary of the work of the late Sanitary Inspector (Mr. W. Ellis—whose unexpected death Dr. Bond refers to in his Report to the East Dean Rural District Council) is also given.

Area	45	Acres.	Popula	ation 18	391	• •	1,525	
				19	901		1,386	
		Ι	ecrease	1891–19	901	• •	139	(9·1 per cent.)
		Estimate	ed popula	ation 19	903	• •	1,386	
	N	Tedical C	Officer of	Health		E. Den	ing. M.	R.C.S.

Mr. Dening in a full Report describes the District as a "little town built on what may be called a tolerably flat plateau, 768 feet above sea level at its highest part. The town consists of stone-built houses, most of them openly situated in the main streets, while some are in the many alleys or 'tures' which intersect the District." It is a purely agricultural district.

There is no public system of sewerage. It is most unsatisfactory to learn that "the house drains which receive the waste water and "daily waste are mostly connected with a catch pit by the means of "covered drain pipes in most instances connected "with a 'swilley,' or fissure in the rock, which are so easily found in "the District." This system of pouring polluted water into cracks in a rocky formation is liable to seriously contaminate the Water Supply of places situated at a lower level, and even possibly for Stow itself, as the well from which their water is drawn is 130 feet deep. To prevent this a Bye-Law (given on page 29 of the County Summary for last year) was drafted by the Stroud Rural District Council—the first Council, I believe, to adopt such a Bye-Law.

Mr. Dening advises that public scavenging should be undertaken by the Council.

A very full description of the public water supply is given. The water is pumped from a well 130 feet deep to a tank, on a tower 40 feet high, with a capacity of 25,000 gallons, one day's supply. The water is turned on daily from 7.30 to 9.30 a.m. and 4 to 5 p.m.,

and on Sundays for two hours, about 18 gallons per head being used. "The water is analysed every three months, and is found invariably "good."

There are four Slaughter-houses, always found in good order.

Mr. Dening says that "we have during the past year felt the need "of an Isolation Hospital and I think it is a great "pity there is not one for the whole Rural and Urban Sanitary "Districts." A tent is kept for the joint use of these two Districts in the event of a case of Small Pox occurring, and it was used during 1903 for a case which arose in the Workhouse, situated in the Rural District.

Four cases of Typhoid Fever were notified during the year, one of them being caused by infected milk.

Mr. Dening deplores the fact that the average number of persons granted exemption certificates under the "conscience" clause of the Vaccination Act, 1898, is so enormously high as 40.5 per cent., the percentage for England and Wales in 1900 (the latest figure available) being 4.3 per cent. He adds: "Should our Urban District" suffer from a Small Pox epidemic in the future, what a cost of lives "and money will this not mean?"

For many years it has been reported that great nuisance has been caused in the District by the keeping of swine. On Mr. Dening's advice, the Council adopted a Bye-Law prohibiting the keeping of swine within 50 feet of a dwelling-house, by which the number of pigstyes has been reduced from 43 to 20.

The birth-rate rose from 23·1 in 1902 to 26·6 in 1903, while the Infantile Mortality fell from 219 to 81, the average for the past 10 years being 118.

	9,818		Population 1891	Acres. Popt	1,169	Area
	9,153	• •	1901			
(6.8 per cent.)	665		ecrease 1891–1901	Decrease		
	9,017	• •	d population 1903	imated popu	$\mathbf{E}_{\mathbf{S}}$	

Medical Officer of Health . . J. Middleton Martin, B.A., M.D., D.P.H.

This Report (as last year) is prefaced with a chart showing as curves the variation in various rates in the Urban District as compared with the corresponding rates in the surrounding Rural District and in England and Wales. The birth rate (20·1) is slightly higher than last year, but still below that for the Rural District. It is explained that this difference is probably due to the development of residential property just over the borders of the Urban District. The nett death rate is about the same as last year, while the Infantile Mortality fell from 159 to 88, a record low figure for this District.

A summary is given of an extended investigation which was made into the distribution of certain diseases in this part of the County—Cancer and other Malignant Diseases, Phthisis and other Tubercular Diseases, and Lobar and Broncho-Pneumonia, to which fuller reference is made in my general remarks under these headings.

With respect to Consumption, a leaflet, calling attention to the high death rate from this cause in Stroud, and to certain means which would tend to diminish the prevalence of this disease, was left at every house in the District—on cards for places of public resort. Also disinfection of rooms in which Consumptive patients have died is now undertaken by the Council free of charge.

The attention of the Council was drawn to a group of 16 dilapidated uninhabited houses which were said to be dangerous to the public health only in the direction of their being more or less structurally unsafe, and the matter was left in the hands of the Surveyor.

A minor improvement has been made in the surface drainage of one part of the town. Matters requiring attention are stated to be the provision of suitable flushing cisterns for those closets at present hand-flushed, and improvement in the method of sewage disposal, the effluent not being satisfactory.

A Committee was appointed to consider the water supply of the town, and, on a Report from a Sub-Committee, directed that two small feeders in the upper supply of the town should be cut off. The general question is stated to be still under the consideration of the Committee.

Attention is called to the fact that no regulations with respect to Dairies, etc., have been adopted, and that such regulations would help to ensure that milk was kept under more cleanly conditions than at present exist.

The only offensive trades carried on in the town are said to be tripe-boiling and manufacture of chemical manure. With respect to the latter, a petition, signed by 20 residents in the neighbourhood of the works, was presented to the Council, and the Clerk was instructed to take the necessary steps to secure the abatement of the nuisance.

Notifiable Infectious Disease was less prevalent in 1903 than in any year since the adoption of the Infectious Disease Notification Act of 1889 in 1892. "On six occasions since the end of the Scarlet "Fever epidemic of 1889–1902 has the disease been introduced into "the town. In one case a nurse girl had infected her sisters and her "charge before it was known she herself had the disease, and seven "cases were the result. With this exception, the disease has been "limited absolutely to the persons primarily infected. In obtaining this result the temporary Isolation Hospital must have contributed in no slight degree. The one instance in which the disease did spread affords an excellent example of one of the difficulties in coping

"with Scarlet Fever: for in some cases the initial illness is of so "slight a nature that it is taken for an ordinary cold, and any rash "there may be is overlooked by the parents. So slight, indeed, is "the illness that often no doctor is called in at all. In the case "under consideration the nurse girl had such an illness before she "came to Stroud. As soon as she arrived she infected her sister "and the child of whom she had charge. The former also had a mild "attack which was entirely overlooked, but a doctor was called in "to see the latter, and at once notified the case to me. It was only "whilst investigating this case that I heard of the nurse girl's slight "illness. On carefully examining her, evidences that her illness "was really Scarlet Fever were clearly found, and a similar state of "affairs was discovered when I visited her home and examined the "brothers and sisters. It is to such cases as these that must be "attributed any apparent failure in stopping an outbreak by "isolation of all known cases. The discovery of these unrecognised "cases involves the most careful watching and investigation, and "unless this is carried out in its entirety, failure in controlling "outbreaks by isolation is sure to occur. Unfortunately, we have "not in this disease the accessory means of diagnosis which we have "for Diphtheria, to which I shall refer presently."

There was only one case of Diphtheria, unfortunately fatal. "Epidemics of this disease are almost entirely due to direct infection "from one person to another, and, like Scarlet Fever, the worst causes "of the spread are mild and unrecognised cases."

Appreciating this fact, the Council, after receiving the letter from the County Council on the subject of Bacteriological Diagnosis, made arrangements for bacteriological examinations in suspected cases of Diphtheria and Typhoid Fever.

An account is given of the cost of the temporary Isolation Hospital, original and working, and it is clearly shown "how much more "economically such an Institution can be worked on a large scale

"than when only small numbers are treated, and the advantage of such a combination of Districts for a Joint Isolation Hospital as has been formed between the Stroud Rural, Nailsworth Urban, and this District." It was hoped that this Hospital would be ready for occupation within six months.

A complete inspection of all the bakehouses in the District was made for the purposes of the Factory and Workshop Act, 1901, and considerable alterations were made in two which were technically "underground" before certificates were granted by the Council for their continued use.

Area 114 Acres.	Population 1891	• •	2,173	
	1901		1,989	
	Decrease 1891–1901		184	(8·5 per cent.)
Estima	ted population 1903	• •	1,952	

Medical Officer of Health .. F. T. Bond, B.A., M.D., F.R.S.E.

Dr. Bond remarks that the table of deaths "shows an entire" absence of mortality from any of the ordinary forms of septic "disease, and, rather curiously, also from malignant disease of any "kind, which is an unusual incident in this locality, and the less to be "expected, as more than 58 per cent. of the deaths were over 50 "years of age. But the actual number of deaths is so small that the "absence or presence of all but the most ordinary causes of death "is very much a matter of chance."

There was only one case of Infectious Disease notified—one of Scarlet Fever. Dr. Bond says "it is scarcely possible in a population "of the size and compactness of Tetbury to have a better record than "this."

"Unfortunately, there is no place either in Tetbury or outside of it to which an infected person could be removed, and, as there appears to be no house in an appropriate position, suitable for conversion into a small Isolation Hospital, it would be necessary to erect one. This, with the prospect of having to build an expensive Workhouse, if the Local Government Board decide to break up the Union, is an enterprise which can scarcely be expected to commend itself to the District Council, who cannot, however, fail to see that they are living on the edge of a volcano, and that an eruption may take place at any moment, in the shape of a tramp, who may bring Small Pox or Enteric Fever into one or other of the three lodging-houses in the town, in which case nothing but a prompt vaccination crusade could arrest the one, or an immediate

"staff of trained nurses, prevent a grave extension of the other." Unfortunately, as I have before mentioned, the attitude of the "Local Government Auditors to expenditure incurred for such an "object is such that no member of the District Council would probably care to incur the risk of being surcharged for signing a cheque to meet it. So that the position would be a very grave one, and one which cannot be contemplated without serious misgivings as to what the result might be. In my last Annual Report I indicated what appeared to be the most feasible solution of this difficult problem, though I am aware that this solution itself is by no means free from difficulties."

The solution to which Dr. Bond refers was a suggestion of a combination of this and the Rural District with Malmesbury, or possibly with Stroud.

The supply of water appears to have been more abundant in 1903, as the engine has always been kept at full stroke.

"Appreciable improvement has been effected during the year in the treatment of the sewage at the outfall works, at a cost of nearly £150, with the result of maintaining the effluent in a condition that has not led to any complaint."

"Improvement (has been made) in the general condition of the houses in Harper Street." Dr. Bond suggests that more might still be done in this direction.

After summarising the work of the Sanitary Inspector (Mr. M. C. Warne), Dr. Bond says: "The above record indicates a considerable "amount of activity generally, and especially in regard to the super-"vision exercised under the provisions of the Factory and Workshop Act.... In this, as well as in other respects, there is "distinct evidence of improvement."

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Medical Officer of Health .. A. Fowell Turner, L.R.C.P., Ed., J.P.

Mr. Turner says: "The statistics for the year 1903 tend to show "that our sanitary condition continues slowly to improve." The infantile mortality, which was 208 in 1899, fell to 143 in 1901, 116 in 1902, and 98 in 1903.

For a considerable part of the year Tewkesbury was supplied with water from the Cheltenham Reservoirs, as there was sufficient water for the two towns without requiring any pumping operations at the Mythe Water Works. Mr. Turner says: "I am sorry that I "am unable to report any great progress in the matter of the closing of old wells and the substitution of water from the town mains. It is a matter of so much importance that I would again urge upon the Sanitary Authority the necessity of the "inspection of the water from wells still in existence in the Borough."

Mr. Turner again draws attention "to the large number of closets "still existing without any proper or efficient flushing apparatus." For the last four years Mr. Turner has advised that Bye-Laws should be adopted under Section 23 of the Public Health Acts Amendment Act, 1890, for remedying these conditions, and for securing the paving of yards and areas; and he says that "it is a matter of "considerable importance, and nothing can be done by the Sanitary "Authority unless such Bye-Laws are adopted." The sewage from Cotteswold Place is now pumped by Adam's Sewage Lift into the main in Cotteswold-road instead of discharging into the ditch by the Hollams.

The Isolation Hospital has been used for cases from the Rural District as well as from the Borough; while the case of Small Pox which occurred in the Town was removed to the Rural District Isolation Hospital at Tredington, which was reserved for this disease. Mr. Turner says "considerable improvement has been effected at the "(Borough) Hospital by the laying on of gas and the instalment of a "Geyser in one of the bath rooms. The second bath room is supplied "with hot water from the kitchen A steam disinfecting "apparatus is necessary if disinfection is to be properly carried out."

"Nearly half the children born in the twelve months are un"vaccinated."

"The inspection of workshops under the Factory and Workshop "Act, 1901, is becoming a very important and arduous part of the "duties of Health Officers."

Mr. Turner refers to some of the difficulties in the way of providing better housing accommodation, though "it is the earnest wish of the "Sanitary Authority to do something towards improving the "condition under which the very poor in this town exist." One of the difficulties is said to be that of obtaining sites, "owing chiefly to "the frequent occurrence of floods, which render much of the "surrounding District unfit for building purposes."

The Report of the Sanitary Inspector (Mr. W. Ridley) is printed with the above. It is stated that "during the summer months the "alleys were regularly washed down with town water by the "Corporation workmen."

Area 8,264 Acres. Population 1891 .. 2,005
1901 .. 1,866
Decrease 1891–1901 .. 139 (6.9 per cent.)
Estimated population 1903 .. 1,838

Medical Officer of Health . . F. T. Bond, B.A., M.D., F.R.S.E.

Dr. Bond says "the birth and ordinary death-rate for this "District continue to be, as they were in 1902, exceptionally high. "This may be due to the fact that the decrease in the population shown at the Census in 1901 was accidentally larger than it should have been, in consequence of there having been fewer inmates than usual in the Union Workhouse, representing, as they do, nearly 10 per cent. of the population. Or the excess may be merely one of those casual fluctuations due to purely accidental causes."

There was one notification of infectious disease, a case of Scarlet Fever.

"No incidents of any special interest have occurred during the "course of the year in connection with the routine sanitary work of "the District," of which a summary is given in the Inspector's (Mr. C. J. Cadle) Report.

Area 18,803 Acres. Population 1891 .. 12,135

1901 .. 14,646

Increase 1891–1901 ... 2,511 (20.7 per cent.)

(Revised for alteration of boundaries to October, 1902)

Estimated population 1903 .. 15,060

Medical Officer of Health .. E. Crossman, M.D.

Since the time of the Census in 1901 parts of the civil parishes of Henbury and Shirehampton were taken into Bristol under the Bristol Corporation Acts of 1901 and 1902, including a population of 579 (Summary Tables, Census of England and Wales, 1901, issued 1903).

Dr. Crossman estimates the population for 1903 at 15,060, and on this basis the birth-rate last year was 23·1 and the death rate 9·2 per 1,000; the Infantile Mortality was 89.

"The number of notifications this year is much less than it has been for many years past, corresponding with the experience of Bristol, with which it is in such close contact. With the exception of a threatened outbreak of Diphtheria in the second quarter of the year at Shirehampton and Avonmouth which resulted in 8 cases, there has been no epidemic in this locality."

A case of Small Pox which was notified appears to have been an aggravated case of Chicken-Pox; the patient was isolated on the Port Hospital Ship.

"The Isolation Hospital at Southmead was in the early part of the year reserved for the isolation of Small Pox, but was not so required. In the beginning of May it was opened for the reception of Diphtheria, when 5 cases were received from

"Avonmouth and 1 from Frenchay. These were all discharged by the 10th June, when the Hospital was disinfected and used for 1 case of Scarlet Fever from Filton."

"The steam disinfector at the Workhouse premises answers its "purpose very well, and the Ambulance affords a ready means for fetching and returning the clothing requiring disinfection."

No school has been closed during the year owing to the prevalence of infectious disease.

Speaking of house accommodation, Dr. Crossman says:—"In 'Shirehampton the population increases faster than the houses, and 'the old parts of the village the houses are old-fashioned and in 'inconvenient. In Westbury there is a new quarter springing up 'adjoining the Durdham Down, but the houses here are suitable 'for the middle class, and are rapidly filled by Bristol people; but 'the old part of the village, where the working class dwell, remains 'stationary, and here the quantity and quality of the houses are 'not good.'

Shirehampton, Avonmouth and Westbury have separate systems of sewers, and "these appear to be in good order and working "satisfactorily." In Filton "there is a stone drain running parallel "with the main road down the hill, which, as I have before noticed, "will sooner or later require attention." At Winterbourne "there is no system of sewerage. Cesspits are the usual receptacle; and "in Frenchay some of the drains of the old mansions communicate "with one another, and sooner or later will give rise to trouble."

Systematic scavenging is undertaken in Shirehampton, Avonmouth and Westbury.

A special Report giving an account of the factories and workshops in detail is included with the above, and the Report of the Sanitary Inspector (Mr. J. F. Henderson) is also presented.

Area 23,726 Acres. Population 1891 ... 6,060
1901 ... 5,441
Decrease 1891–1901 ... 619 (10·2 per cent.)
Estimated population 1903 ... 5,486

Medical Officer of Health .. G. Findlay, M.A., M.B.

Dr. Findlay says that "the centres of population are chiefly at "Campden and Moreton . . . Campden is now the head"quarters of the Guild of Handicraft and Art, where many of the "members live and carry on their work; otherwise the District is "a purely agricultural one." In his estimate for the population he has "allowed for the decrease of population continuing in the same "ratio as during the decade 1891–1901, and also for the increase at "Campden owing to the advent of the workers in the Guild at "Campden." The birth rate (23.8) was slightly below the average, and also the death rate (13.2). The infantile mortality (53) was the lowest yet recorded in the District.

After the occurrence of two cases of Small Pox, Chicken-Pox was again added to the list of notifiable diseases for the period 19th May, 1903, to 15th April, 1904. The first case of Small Pox was that of a navvy working on the new railway, near Honeybourne; the second case (a resident) appears to have contracted the disease from the navvy. Both cases were isolated in the tents, which are now stored at Moreton-in-the-Marsh, while the furnishings are kept in the cottage at Todenham, rented by the Council. Both men recovered.

Of the 35 cases of Scarlet Fever 27 occurred at Campden. Dr. Findlay appears to attribute the spread to mild cases which escaped notice and to the fact that, owing to the lack of an Isolation Hospital, all the patients had to be nursed at home. Dr. Findlay found four children in the Catholic School at Campden "desquamating freely." Five of the cases which occurred at Moreton were removed to the Isolation Wards of the Cottage Hospital.

There were 7 cases of Typhoid Fever, of which 6 occurred at Campden.

"Measles appears to have been the most fatal of the zymotic Diseases in the District. All the deaths were of children under 5 years of age."

Dr. Findlay calls attention to the fatality of this disease owing to the complications which so often follow. Two schools were closed owing to the prevalence of this disease.

"Nothing has been done in the matter of providing a permanent "Isolation Hospital for the District during the year. If there had "been a hospital into which the earlier cases of Scarlet Fever could "have been moved, I do not think there would have been so many "cases in the town as there have been. Probably the best way would "be for the Council to come to some arrangement with the neighthouring Councils, by which cases could be removed to their "Hospitals if required. It is much more economical to nurse a "number of cases together than to keep up an establishment for "only a few cases." In 1896 the County Sanitary Committee suggested that a Hospital might be established at Moreton-in-the-Marsh for the joint use of this District and the Urban and Rural Districts of Stow-on-the-Wold.

The new Bye-Laws have been returned by the Local Government Board, and are being considered by a Committee. Public scavenging is desirable at Campden and Moreton.

A scheme for the water supply of Chipping Campden has been prepared, and a Local Government Board enquiry was held at the end of the year into an application for a loan of £4,500 to bring water to Campden from three springs on land owned by the Earl of Gainsborough. The scheme for the supply of Moreton from springs in Bourton Wood was "abandoned owing to the proprietor of the "springs withdrawing his sanction to the taking of the water."

Another scheme is now under consideration for bringing water from a spring near Great Wolford. The improvement of the water supply of Bourton-on-the-Hill, which has been reported for some years as being unsatisfactory owing to liability to contamination, is postponed pending the settlement of the Moreton scheme.

"The new sewage scheme (for Moreton) is still before the Local Government Board, but is not gone on with until the water supply is settled. The sewer brooks and ditches have been again cleaned out, and the cages with alumino ferric are still regularly attended to as required by the Thames Conservators."

"The new Bye-Laws have now been returned by "the Local Government Board, and a Committee of the Council "has been appointed to consider the matter. They would be very "useful at present, especially at Campden, where there is some new "building going on."

The report of the Sanitary Inspector (Mr. C. J. Gander, Cert. San. Inst.) is also printed with the above, and gives a summary of the work done during the year.

Area 18,401 Acres. Population 1891 .. 4,670

1901 .. 4,637

Decrease 1891–1901 .. 33 (·7 per cent.)

Estimated population 1903 .. 4,650

Medical Officer of Health .. J. F. Johns, M.D., D.P.H.

Dr. Johns says that "there has been nothing to break the satis"factory record of health that the District has enjoyed for some
"years past. In spite of the extremely unfavourable weather
"experienced during the year, which seriously affected the low-lying
portions of the District, the sickness and mortality rates remained
"very low."

"No progress has been made by the Council towards a better "supply of water to those portions of the District where it is much "needed, and where it cannot be properly undertaken by private "enterprise With prospective building operations "in the part of the parish (Badgeworth) known as the Reddings, "the fact that a large number of houses are still supplied with unsafe "water from shallow wells may induce the owners to avail them-"selves of a proper water supply that is within easy reach. The "much discussed and necessary water supply to parts of Bentham "has not advanced beyond the discussion stage." Speaking of Shurdington, Dr. Johns says "the water supply is from shallow "wells. In the centre of the village is an ample supply of easily-"reached underground water that could be utilised. At present "this finds its way into the sewer, and is the main cause of the "inefficiency of the sewage field which receives so much water "contaminated with sewage that it is incapable of efficiently purifying "it.

"Those sanitary matters that have mostly been brought before the Council have been connected with the working of the sewage farms." (In July an action was brought

against the Council by Mr. J. T. Hewinson for the purpose of obtaining an injunction to restrain the defendants from polluting the Hatherley Brook, by the Shurdington Sewage Farm. In the course of the case the plaintiff waived the claim for an injunction, it having been intimated by Counsel that there had been an improvement of late in the condition of the brook; but damages for the loss of the horses were assessed by the jury at £89 9s. Od. Judgment was entered for the plaintiff for the amount stated, with costs.)

Dr. Johns says that "at present the underground water finds its "way into the sewer, and is the main cause of the inefficiency of the "sewage field (at Shurdington) which receives so much water "contaminated with sewage that it is incapable of purifying it." "A "scheme of sewerage for including the undrained portions of "Prestbury and for relieving the unsatisfactory state of the present sewerage field would be of great value," and is now before the Council. "Until such a scheme is put into execution the frequent complaint of nuisances arising from inadequate cesspools must of necessity continue." At Uckington "in the methods of sewage disposal much improvement is still wanting."

Summing up these questions generally, Dr. Johns says:—"The "frequently expressed opinion on the present system of broad "irrigation has received support by the unsatisfactory results "obtained during a wet year, not only by our own irrigation fields, "but on those others where broad irrigation is attempted over lands "so clayey as to be unfit and useless for the purpose. Any future "scheme of Sewage Disposal should, in my opinion, rely entirely "upon a modern and improved form of bacterial purification."

Dr. Johns expresses regret that no Regulations with respect to Dairies, Cowsheds and Milkshops have been adopted.

"But for an unfortunate continuance of Scarlet Fever the District has been quite free from any serious notifiable disease." There were 42 cases of this disease, all of which were isolated in Hospital.

This is the only District in the County in which Measles has been made a notifiable disease. After five years' experience, Dr. Johns advises the Council to rescind the resolution making Measles compulsorily notifiable.

Dr. Johns says "the impossibility of thorough disinfection of "cottages and old houses in the country has been frequently brought "to the notice of the Council," and to this fact he inclines to attribute some cases of infectious disease for which no other explanation can be found.

"At present the Council possesses no means of steam or dry heat disinfection. It is certainly a necessity if proper disinfection is to be carried out."

Area 63,284 Acres. Population 1891 ... 16,795
1901 ... 17,621
Increase 1891–1901 ... 826 (4·9 per cent.)
Estimated population 1903 ... 16,500

Medical Officer of Health .. Dr. F. T. Bond, M.D.

Dr. Bond remarks that "the problem of estimating the population "in each District for years subsequent to that in which the Census "was taken is in no District free from difficulty, especially as the "interdecennial period lengthens, and in some cases it is particularly "complicated—e.g., in the Rural Districts of Chipping Sodbury and "Gloucester.

"The disturbance in the population of this District caused by the construction of the new line of the Great Western Railway from Wotton Bassett to Severn Tunnel, to which I referred in my last Annual Report as not having quite ceased to operate, in consequence of the continued employment in connection with the line of a considerable number of persons, makes it still difficult to estimate the probable population during the past year. But, after consultation with those who are most likely to know, I have put it at 16,500, making an estimated decrease of 1,195 from the number given for the Census of 1891, and a decrease of 295 from that of the Census of 1891."

On this estimate the birth rate for 1903 is rather higher than it has been for some years, whilst the death rate is about the average.

During the year notifications were received of three cases of Small Pox, 47 of Scarlet Fever, 10 of Diphtheria, 1 of Typhoid Fever, and 10 of Erysipelas. The three cases of Small Pox were an elderly man, his niece and his nephew. The man had been in the Bath Mineral Water Hospital, where a case of this disease had occurred. He, in common with the other patients, was at once sent

home, but on his way there spent a night at the home of his nephew and niece, two out of the four persons in the house contracting the disease from him. The niece was removed to the Isolation Hospital on Sodbury Common, while the two other patients were quarantined in their respective cottages.

With reference to the increase of accommodation at the Isolation Hospital, Dr. Bond makes the following remarks:—

"I have in my last and in previous Annual Reports referred to the insufficiency of the small Cottage Hospital on Sodbury Common to meet the requirements of this District for isolation purposes. Its position is as good as could be desired, but it could only accommodate two patients at a time, and if the outbreak to which I have just referred had been of a more serious character than it was, the Hospital, which was of great service, so far as it was actually required, would have been quite insufficient to meet the needs of the case. For, apart from the actual lack of ward space, the provision for administrative arrangements generally is so defective that if additional patients were received they could not be properly nursed.

"In the early part of the year the District Council were offered, on very favourable terms, a wooden building which had been erected in the parish of Old Sodbury for the purposes of an office by the contractor for the Wotton Bassett line. On being asked by the Council for my opinion as to the possibility of utilising this structure, by removing it from its then position to the Hospital premises, as an addition to that structure, I felt it necessary to point out the objections to this course and to explain that, even if it were carried out, it would involve much greater outlay than the mere prime cost of the structure itself to re-erect and adapt it properly for the object in view. The Council decided, however, to proceed with the purchase; the office was taken down and the materials were removed to the Hospital premises. Under these

"circumstances, and in view of the considerations that there was no immediate prospect of obtaining more efficient accommodation than this structure would afford, and that it was better to have a Hospital that is defective than none at all. I undertook to advise as to the best way of dealing with the structure so as to make it as "effective an addition as possible to the resources of the Hospital. I am glad to be able to say that, though the work has cost a good deal more than was anticipated when the project was first contemplated, a material increase of useful ward accommodation has been obtained at less cost than would have been involved if it had been provided in any other way; and it might have cost much less than it has done if the work had been done by contract instead of by measure and value.

"But I am obliged again to emphasise the fact that this increase "of ward accommodation, useful as it would be in such an emergency, "as may at any time overtake the District, will not be of any "practical use unless additional administrative resources "provided for disinfection, storage of food, closet accommodation, "laundry work, mortuary and other purposes. The improvement, "also, of the approach to the Hospital, to which I have more than "once called attention, is of the first importance, as it is really not "fit for use in a wet season. When these requirements have been "met, the Hospital will be a good illustration of what may be done "in a Rural District, at the smallest practicable cost, to provide a "first line of defence against a serious outbreak of epidemic disease." "It will by no means satisfy the requirements of official optimism in "this respect; but, to one who has had to wait for more than 30 "years to realise even this modest approach to the ideal offered by "the Isolation Hospitals of our great centres of population, built "and equipped, as they are, by the aid of loans which escape the "notice of the ratepayer amidst the general flood of indebtedness in "which he is being steadily immersed, it offers a prospect of relief "from anxieties which every Medical Officer of Health must feel

"who realises that he may any day be overtaken by a serious outbreak of infectious disease against which he is powerless without the aid of an Isolation Hospital."

Early in the year a scheme for dealing with the pollution of the Wickwar Brook was presented by Mr. W. Naylor, Assoc. M. Inst. C.E. (late Chief Inspector of the Ribble Joint Committee), to the District Council at an estimated cost of £1,397. "These works practically "consist in an extension of the present arrangements for tank and "filter operations." A deputation was sent by the Council "to "visit two localities in which Mr. Naylor has been for some time "dealing with cases similar to that of Wickwar, with results which "were sufficiently satisfactory to induce the Council to adopt Mr. "Naylor's proposals. . . . Further progress is now "awaiting only the decision of the Local Government Board to hold "a local inquiry on the subject."

Dr. Bond refers again "to the trouble in prospect in dealing "with the sewage from the houses on the road leading from Yate "Station to Chipping Sodbury," most of the drains being at present connected with the roadside drain.

"There has not been any material extension of the system of the West Gloucestershire Water Company during the past year but in the latter part of 1902 the Company's mains were extended to Little Badminton, Petty France and Didmarton, so that there are now two lines of mains, each of them from six to eight miles in length, running through a considerable portion of the Chipping Sodbury District."

Dr. Bond gives a summary of the work of the Sanitary Inspector (Mr. J. B. Adams), and refers more particularly to "the important "part which the inspection of factories and workshops plays in the "routine work."

Area 80,991 Acres. Population 1891 ... 12,877
1901 ... 12,084

Decrease 1891–1901 ... 793 (6·2 per cent.)

Estimated population 1903 ... 11,926

Medical Officer of Health .. F. T. Bond, B.A., M.D., F.R.S.E.

The epidemic of Scarlet Fever which prevailed in this and the Urban District of Cirencester during 1902 declined last year, and the number of cases notified was reduced by more than one-half: it necessitated the closure of only one school in 1903. The disease was of a "very mild" type. There were four cases of Typhoid Fever in one family. "The infection was probably derived from the water of "a well on the premises, which had become polluted from leakage "from a defective drain."

Dr. Bond says the resources of the Joint Isolation Hospital, to which 13 of the cases of Scarlet Fever were removed, "have been "improved during the year by the purchase of a convenient vehicle "for the removal of patients, and also of one of Lingner's Formalin "Disinfectors." At the same time he urges the need of either enlarging the Hospital or of providing a new Hospital elsewhere. Fuller reference to this matter will be found in the Report of the Cirencester Urban District.

This is the first of the Districts in this County to provide for the Sanatorium Treatment of Consumption; for this Council has acquired a bed in the Sanatorium which is being built for the three Counties of Gloucestershire, Somersetshire and Wiltshire, at Winsley, nearly at the point of junction of the three counties. Dr. Bond refers to the advantages to be gained by the education of patients during their period of residence in the Sanatorium.

With reference to the pollution of the Churn and Coln by the drainage of Stratton and Fairford respectively, in respect of which

action has been taken by the Thames Conservators in previous years, Dr. Bond says: "The generally wet character of the year has "been favourable to the maintenance of a satisfactory effluent in "connection with the sewage outfalls of Fairford and Stratton "respectively, and no complaints have been received from the Thames "Conservancy in regard to either place."

Water of "unquestionable purity" has been laid on to Coates, Daglingworth, Duntisbourne Rouse, Fairford, Hatherop, Kemble, Quenington, North Cerney, Rodmarton and Stratton, and shows "how much has been done by the landowners of the neighbourhood," by whom this work has, in most cases, been carried out, to meet "the requirements of their labourers in this respect."

Dr. Bond again calls attention to the danger to the local supplies of the Great Western Railway pumping operations at Kemble, and of the pumping to supply the upper reaches of the Canal, and says that the Rural District Council have intimated to the Railway Company "that they would oppose any action in this direction."

After summarising the Report of the Sanitary Inspector (Mr. W. B. Harmer), Dr. Bond says: "I am able, from the result of my "own observations when visiting different parts of the District, to "confirm Mr. Harmer's statements, and to express the opinion that "its sanitary condition is generally as satisfactory as it has been for many years past."

Area 26,786 Acres. Population 1891 ... 12,166

1901 .. 11,636

Decrease 1891–1901 ... 530 (4.4 per cent.)

Estimated population 1903 .. 11,517

Medical Officer of Health ... Francis J. Joynes, M.R.C.S.

Mr. Joynes gives a description of the District, which comprises 11 parishes, drained by five brooks. "Nympsfield is the only village "situated at the top of the hill, from 700 to 800 feet above sea level, and Slimbridge is the only parish wholly situated in the valley."

"The places in the District in which a want of more house accommodation is felt are Dursley and Cam."

A Local Government Board Inquiry on the application of the District Council for a loan of £9,000 for the sewerage and sewage disposal works for Dursley and Cam was held on the 16th April, 1903, by M. K. North, Esq., M.Inst.C.E. The sanction of the Board was obtained, and the tender of Mr. J. Riley to carry out the work for £13,361 15s. Od. was accepted. The first sod was turned on Thursday, 26th September, by Mrs. Eyre, of Kingshill, Dursley, who has most generously given £1,000 towards the cost of the Dursley part of the scheme. (From the Report of the Sanitary Committee for 1898 it appears that Dursley is indebted to the generosity of the same lady for a part of its water supply.)

"Wotton-under-Edge has no proper system of sewerage. Some "of the sewers are constructed of loose stone." Some of these have been replaced by pipes, and the Council has decided to spend another £500 for the purpose of carrying out further improvements "which are needed in the drainage of the town . . . All sewers of "Wotton-under-Edge empty into the Dyer's Brook."

[&]quot;The Cam and the Dyer's Brook are the most polluted streams in the District."

"The most common form of closet is the old-fashioned privy with vault, and this of all the methods is, in my opinion, the most offensive and dangerous." The pail closets in Dursley and Wotton-under-Edge are emptied weekly by the public scavenger. In Cam only house refuse is removed.

There appears to have been no change in the water supply of the District, but the public well at the Black Horse, North Nibley—so often referred to—is stated now to be a success. "For the most part the District may be said to be fairly well supplied with wholesome "water. There was no lack, so far as I am aware, of water in any "part of the District during the year."

All dairies, slaughter-houses and common lodging-houses have been inspected during the year, and appear to have been found satisfactory. A detailed account of the workshops is given.

There were 46 cases of infectious disease notified during the year; 13 of the 25 cases of Scarlet Fever occurred in a proprietary school at Dursley. Three patients suffering from Scarlet Fever were removed to the Isolation Hospital at the Moors from Dursley. Again Mr. Joynes records that no action has been taken to provide a Hospital at the site on Breakhearts' Hill, North Nibley, which was purchased some time ago. Apparently one difficulty is the water supply.

With the above is presented the Report of the Sanitary Inspector (Mr. T. Robinson), whose death two months later was greatly regretted by the District Council and the neighbourhood generally.

Area 28,626 Acres. Population 1891 .. 20,401

1901 .. 20,011

Decrease 1891–1901 .. 390 (1.9 per cent.)

Estimated population 1903 .. 19,933

Medical Officer of Health .. F. T. Bond, B.A., M.D., F.R.S.E.

Dr. Bond says that the table of deaths "exhibits a decided "improvement on the mortality of the preceding year in regard to deaths from Septic Disease, as well as from all other causes . . . "(though) there has been little diminution in the prevalence of these "diseases."

"The principal focus of Scarlet Fever and Diphtheria in this District is the Cinderford Valley. . . . The primary reason for such a preponderance of this locality in regard to these diseases is no doubt the fact that it has such a large child population."

Dr. Bond appears to be of opinion that there is evidence to show that both diseases are spread mainly by mild unrecognised cases. He says "prompt and energetic action in dealing with the mild and "often unsuspected cases of Scarlatinal and Diphtheritic sore throats, "causing absence for a day or two for 'a cold' is the only practicable "way of preventing the ordinary sporadic occurrence of this affection from developing into the regularly recurrent epidemics which have hitherto characterised this in common with all the other infectious diseases of childhood."

Isolation accommodation for infectious diseases exists in this District in the form of a Hospital at Green Bottom and a house at Soudley. The former was built in 1896 "solely for the purpose of "receiving cases of Small Pox," and the latter "was taken some "years ago for the reception of cases of Enteric Fever." On four occasions during 1903 the Green Bottom Hospital was used for isolating 11 cases of Diphtheria.

Some discussion has arisen during the year in connection with these Hospitals. Dr. Bond says: "The course most in the interest "of the District would be to retain the Green Bottom Hospital "exclusively for cases of Small Pox and to provide an Isolation "Hospital for general purposes in the immediate neighbourhood of "Cinderford, where its position would render it available for the "whole of the District, and much more suitable for administrative "purposes and use than either of the two existing structures."

"No steps have been taken in regard to the need for sewerage on "Littledean Hill."

Complaints were received during the year from the East Dean Parish Council "of offensive emanations from the Sewage "Works at Soudley, but (Dr. Bond says) I was unable, on visiting "them, to discover that there was anything that could be considered "seriously offensive or prejudicial to health, though I am bound to "say that the condition of the Works is generally not so satisfactory "as could be desired."

"The heavy rainfall of the year has enabled a constant supply to be maintained in the Cinderford District during the whole year." The adit at Green Bottom has been cleaned and improved, and mining experts have given their opinion that additional headings would necesse the yield, and possibly "if additional storage accommodation were provided, the whole of the requirements, not only of "Cinderford itself but of Drybrook and the Ruardean Hill part of the District might be met from this source."

In recording the unexpected death of the Sanitary Inspector (Mr. W. Ellis), Dr. Bond hopes that "advantage will be taken of the "opportunity which the vacancy in the office affords to make it a "condition that the Inspector shall in future reside at Cinderford."

(GLOUCESTERSHIRE PARISH OF LECHLADE.)

Area 3,870 Acres. Population 1891 ... 1,266
1901 ... 1,179
Decrease 1891–1901 ... 87 (6.9 per cent.)

Estimated population 1903 .. 1,179

Medical Officer of Health .. F. E. Streeten, M.R.C.S., D.P.H.

This village is supplied with water "from works under the control "of the Rural Sanitary Authority. It is of good quality and "abundant, and is derived from the gravel beds on the north side of "the town. The water is pumped by a wind engine to a tank, and "distributed by gravitation in service pipes. There are some private "connections, but the main supply is by stand pipes." There are also some surface wells in the town.

There is no complete system of drainage, but part of the town is sewered, and there are outfall works with "settling tanks and "filter-beds. . . . Pail closets and privy vaults are in use in the larger "part of the town."

The Isolation Hospital for the District is situated in this parish, and consists of two stone-built cottages with accommodation for six cases. Two Berthon Huts are also kept ready for use.

There are seven dairy farms in the parish, which are all inspected.

Area 30,669 Acres. Population 1891 .. 9,604

1901 .. 10,779

Increase 1891–1901 .. 1,175 (12·2 per cent.)

Estimated population 1903 .. 11,178

Medical Officer of Health .. F. T. Bond, B.A., M.D., F.R.S.E.

Dr. Bond attributes the low death-rate (11.0) to the altered age and sex constitution of the population after the extension of the City.

Scarlet Fever was more prevalent last year than in 1902, principally "due to an outbreak at Elmore." The limited outbreaks at Huccle"cote and Ashleworth were caused by "infection from the City of "Gloucester, though it was subsequently diffused to some extent in "both cases by the schools." There were seven cases of Typhoid Fever, the origin of which was obscure.

The arrangement with the City for the admission of cases of infectious disease to the City Hospitals at a charge of £2 2s. Od. a week is to be continued for the present. There is a suggestion that the City and Rural District should combine in providing accommodation for both Districts.

Defects were found in the sewers of the Sandhurst portion of the North End Sewers after they were completed, some of which have been remedied; these have been the subject of "an elaborate report "by a Committee of the Council." 85 connections were made with these sewers last year. The sludge and garden produce at the outfall realised £17 last year, while the expenses during the year were £260 11s. 6d.

"The only locality in the District in which the need for improvement in the drainage is pressing is at Churchdown." Dr. Bond
says "the choice of remedies lies between a drainage scheme
. . . and a system of scavenging, by which solid and
liquid refuse alike shall be systematically removed in movable
receptacles."

With respect to house accommodation, Dr. Bond states that "considerable activity exists in the erection of new houses in some "parts of the District, plans for 35 under the Bye-Laws being "approved," but that "the gravest of (the remediable evils) is the "need of better housing accommodation for labourers than exists in some parts of the District, where old tumble-down cottages are still more in evidence than they should be; but where there are no "landowners sufficiently interested in the soil to be induced to build "new cottages."

Dr. Bond apparently thinks that the increased facilities for communication with the City provided by the electric trams may "create more speculation in this direction."

The summary of the work done by the Sanitary Inspector (Mr. F. Weaver) "represents the average work required in such a District as "this."

Area 24,634 Acres. Population 1891 ... 8,153
1901 ... 8,649
Increase 1891–1901 ... 496 (6·1 per cent.)
Estimated population 1903 ... 8,756

Medical Officer of Health .. F. T. Bond, B.A., M.D., F.R.S.E.

Dr. Bond states that this District was formed as a result of the Local Government Act, 1894, by a combination of the Gloucestershire Parishes of the Chepstow Poor Law Union.

"The mortality from Septic Diseases has been unusually high in this District during the year. Scarlet Fever, Measles and Whooping Cough have all been prevalent, though the first of these diseases has been much less so than in 1902." Whooping Cough necessitated the closure of three schools.

"The most serious feature of the year is the unusually large number of cases of Enteric Fever. All occurred at Lydney with the exception of three, of which two were at Tidenham, and were connected with a puzzling series of cases of this disease, which followed one another at the end of 1902." Details of this outbreak were given in Dr. Bond's Report last year. 16 of the above cases appear to have occurred in two streets, 5 in one and 11 in the other. Of the former group 4 were caused by contamination of the well water, and when the use of this was stopped cases ceased to occur. With respect to the outbreak in the second street, Dr. Bond says: "Although the position of the wells from which these persons obtained their water supply was such as to lay them open to likelihood of pollution, there were circumstances connected with most of the cases which made it improbable that the infection was "derived from this source."

"What, then, was the origin of the mischief? It is to be found, "I believe, in the fact that during the period in question the bed of

"this narrow street was in a state of extreme disorganisation: first, in connection with the laying of the water main, and then in making good the damage done to the main sewer, which was very defective in character, and re-laying it. . . . In the coincidence between these two events is, I think, to be found the cause of some of the cases, at least. . . . This view of the origin of the mischief is supported by the fact that the only other case of Enteric Fever notified was one that occurred subsequently to the foregoing, in a man who had been employed at work on this very sewer. There was some reason to think that specific infection might have been introduced into the sewer from the dejecta of a child, six months old, who had been brought home from a house at Chepstow in which Enteric Fever existed," and who died on the 16th January.

"Material improvements have been effected in the structure of "the Hospital in connection with the drainage, the "provision of a larder, and the rectification of defects in the heating "arrangements." At present there is provision for only one disease at a time, though "it was unavoidable to receive a case of Enteric Fever, "for which treatment in Hospital was very expedient, in a ward with "a child convalescing from Scarlet Fever It cannot, "therefore, be too distinctly understood that, with its present limited "resources the Alvington Hospital is quite insufficient to receive "more than a very small number of cases for which isolation is "urgently needed, and that to attempt to use it for the general "isolation of patients in even a moderate outbreak may lead to serious "disaster. The question of providing further accommodation by "extending the present Hospital has been discussed by the Council "and Mr. Elliott has prepared a plan for so doing, but the matter "has not as yet gone beyond this stage."

"Much trouble and expense has been incurred in rectifying defects in the new sewerage system of Lydney . . . No progress has been made with regard to the sewerage of the houses at Mount Pleasant. This is a matter which calls for urgent attention, as its further neglect may lead to serious trouble."

Dr. Bond gives an account of the new system of water supply for Lydney, which he describes as "certainly the most important "sanitary work yet carried out in Lydney." The source of water is in an adit in the side of the hill at Ferneyley, eight miles from Lydney, with a yield of 260,000 gallons in 24 hours. The water is pumped by two engines—one driven by oil and the other by producer gas—working a set of pumps capable of delivering 16,000 gallons per hour, to two twin reservoirs (of 190,000 gallons' capacity), 300 feet above the engine on the Bream Road. The cost of the scheme was a little over £10,000. The more elevated part of the District, from Primrose Hill to Allaston Mesne is supplied by a high-pressure main. The scheme was designed and carried out by Mr. J. Fletcher Trew, C.E., of Gloucester.

After summarising the work done by the Sanitary Inspector (Mr. G. J. Elliott), Dr. Bond says "the responsibility of his work has "been materially augmented during the year by the extensive "quarrying works opened up at Tidenham by Sir John Aird and Co.," which has also "led to some increase of pressure on the house "accommodation, but no serious cases of overcrowding have come "under (Dr. Bond's) notice, most of the men being lodged in the "town of Chepstow."

	1,635		Population 1891	Acres. Po	8,833	Area
	1,485	• •	1901		,	
(9·2 per cent.)	150	• •	ecrease 1891–1901	Decre		
	1,449	• •	d population 1903	stimated p	Es	

Medical Officer of Health .. A. Thomson, M.B., D.P.H.

This District is the smallest Rural District in the County, both as regards area and population. Dr. Thomson says that the birth-rate was "slightly below the average, and (that there was) an unusual "number of deaths among infants, this last being mainly due to "deaths from Whooping Cough."

The District was "very free from Infectious Disease "mainly due to the fact that the villages containing the bulk of the "population are not much exposed to imported infection, lying, as "they do, off from the main roads, and isolated."

"The sanitation of the District is mainly concerned in attention to the proper upkeep of cottage property, and in the maintenance of proper water supply, drainage and whitewashing of interiors."

"The long-standing sanitary defect of proper water supply for the village of Long Marston is a matter as far from solution as it was 20 years ago."

With regard to the question of Isolation Hospitals generally, Dr. Thomson says: "One reads from time to time in the daily press "and elsewhere discussion as to the value of Isolation Hospitals and "their effect on checking disease. It is worth consideration whether "the writers of articles on the subject have really had experience of properly equipped hospitals with capable nursing staffs; for there is little doubt that any laxity in the management of an infectious hospital soon does away to a great extent with any benefit to be derived from it by the general public.

"I am satisfied that in past years the absence of hospital isolation for Kineton and Long Marston would probably have resulted in a number of cases in these villages."

A summary of the inspections of the Sanitary Inspector (Mr. J. Izod) is printed with the above.

(GLOUCESTERSHIRE PART).

Area 35,541 Acres. Population 1891 ... 7,432

1901 .. 7,067

Decrease 1891–1901 .. 365 (4.9 per cent.)

Estimated population 1903 .. 7,067

Medical Officer of Health .. W. Norris Marshall, M.R.C.S.

Mr. Marshall says that "the entire population of the District, "with the exception of the small town of Newent and Dymock and "Redmarley (the latter in Worcestershire), is rural," and that "while 1903 was the wettest within memory, it was, nevertheless, one of the healthiest . . . I find also, as an additional evidence of the lessened amount of sickness generally that some of the large benefit societies have actually paid less to sick members during 1903 than during the previous year, although those societies have more than proportionately increased their numbers."

Mr. Marshall again has not separated the Gloucestershire and Worcestershire figures, but as Mr. Fosbroke (County Medical Officer of Health for Worcestershire) has kindly sent me the figures for his County, I have been able to calculate those for Gloucestershire.

There were 38 cases of notifiable disease during 1903: 17 of Scarlet Fever, 11 of Diphtheria and 2 of Small Pox. The two last—both of them tramps—were removed to the Isolation Hospital at Oxenhall, 1½ miles from Newent. Mr. Marshall says: "I believe "an expense of between £60 and £70 fell upon the ratepayers in "connection with these cases, and this seems a very considerable "sum to pay for an object-lesson as to the necessity for vaccination "and re-vaccination being efficiently carried out throughout the "length and breadth of England."

One school was closed owing to the prevalence of Measles.

"The springs have all been refreshed and the wells filled."

The Report of the Sanitary Inspector (Mr. Thomas Smith) gives a summary of the work done during the year.

Area 70,018 Acres. Population 1891 .. 8,885

1901 .. 8,100

Decrease 1891–1901 .. 785 (8.8 per cent.)

Estimated population 1903 .. 8,100

Medical Officer of Health . . E. J. Ryan MacMahon, L.R.C.P., I.

Mr. Ryan MacMahon says: "In some particulars the past year "has been a record one, unfortunately of an undesirable character, "the number of notifications of infectious diseases being 100. "This greatly increased total is almost entirely made up of Scarlet "Fever (97 cases), which was of a particularly mild form, as "evidenced by the fact that there was not a single death due to this "disease." 75 cases were removed to Hospital, two on a magistrate's order. Mr. Ryan MacMahon attributes the fact that the disease persisted so long was want of efficient disinfection. He says: "In "former Reports, as also at a Meeting of the Board, I have drawn "attention to the necessity of a more efficient means of disinfection being employed"; and he hopes that "the experience dearly "taught by the Scarlet Fever of 1903 may lead to something more "capable of disinfecting than an alformant lamp being adopted."

The house accommodation is stated to be fairly satisfactory. The water supply was "abundant during 1903."

"Systematic visits of the District were made by me during the "year." The Sanitary Inspector (Mr. J. Waine) made 125 visits.

Area 17,326 Acres. Population 1891 .. 3,091

1901 .. 2,944

Decrease 1891–1901 .. 147 (4.8 per cent.)

Estimated population 1903 .. 2,944

Medical Officer of Health .. Cecil A. Corke, F.F.P.S.

Mr. Corke says "the District has been comparatively free from "Zymotic Disease."

- "I have pleasure in informing you that the Gloucestershire "County Council have made arrangements by which any registered
- "Medical Practitioner may send specimens of doubtful cases of
- "Diphtheria and Typhoid Fever for Bacteriological Examination,
- "free of cost.
- "The drainage of the District has been carefully supervised, and several improvements effected.
- "Altogether the District remains in a fairly good sanitary state, and improvements are being made as opportunity arises, and the Districts are able to effect them."

From the summary made by the Sanitary Inspector (Mr. H. S. Harvey) of work done it appears that some improvement has been made at the springs of Willersley Waterworks.

STOW-ON-THE-WOLD RURAL DISTRICT

(GLOUCESTERSHIRE PART).

Area 42,203 Acres. Popluation 1891 .. 7,142

1901 .. 6,473

Decrease 1891–1901 .. 669 (9.4 per cent.)

Estimated population 1903 .. 6,423

Medical Officer of Health .. W. Churchill Moore, M.A., M.B.

Dr. Moore says: "I have based my returns upon the figures of "the 1901 census, for I believe the population of your District to "remain nearly stationary. Several new houses have been erected; "on the other hand, several old ones have fallen out of repair, and "are untenanted.

"There were 47 cases of infectious disease notified during the "year," 25 of these being cases of Chicken-Pox, which is a notifiable disease in this District. One case of Small Pox occurred at the Workhouse, Maugersbury, and was isolated.

"An outbreak of Typhoid Fever occurred at Maugersbury; nine cases were notified, one of which proved fatal. It commenced at Park Farm, where a large dairy is kept. The water supply came from a well situate upon the premises, the water of which was found to be polluted."

Dr. Moore says the "District is still without any Isolation" Hospital, all infectious cases having to be treated at their own houses. An Isolation Hospital for the whole District is badly "needed.

"A small ward, capable of accommodating two or three cases of "Small Pox, is also needed, especially as so many certificates of "exemption from vaccination have been granted to parents in this "District during the past twelve months. The cost incurred to "isolate the solitary case which occurred in your District in February "last would have gone a long way to supply this need."

In 1896 a suggestion was made by the County Sanitary Committee for a combination of this District with Stow-on-the-Wold Urban and Campden Rural Districts to provide an Isolation Hospital for the joint use of the three Districts.

"Measles occurred in epidemic form at Oddington and Evenlode
".... necessitating the closure of these schools for a
"time."

"The public water supplies have been well maintained, and "several samples of water submitted to me by the Inspector were found to be satisfactory."

The supply of Upper Slaughter from the "Seven Springs" appears to have been completed.

Dairies, cowsheds and milkshops have been inspected, and necessary improvements enforced.

Area 37,221 Acres. Population 1891 .. 28,510

1901 .. 27,793

Decrease 1891–1901 .. 717 (2.5 per cent.)

Estimated population 1903 .. 27,630

Medical Officer of Health .. J. Middleton Martin, B.A., M.D., D.P.H.

"The year it is now my duty to review is an exceptional one in many respects. It has been the wettest year and one of the coldest summers on record: rain fell on about 50 per cent. more days than the average number, and the rainfall has exceeded the average yearly total by 41 per cent. to 50 per cent. at different stations. The year has also been exceptional in the small number of cases of notifiable disease, a total of only 70 having been notified, the lowest number in any year since the adoption of the Infectious Disease (Notification) Act, 1889, by the Council in 1890. The number would have been very much less but for the school outbreak of Diphtheria in Horsley (27 cases) in the early part of the year.

"Another exceptional feature in the year's history was an outbreak of Diarrhœa at Woodchester, connected in a measure with the heavy rainfall in the early summer months, whereby the water supply of a part of the village became contaminated by the specific organism of this disease.

"The year has also been eventful in the direction of Public Health Administration. The Bye-Laws were definitely sanctioned on the 9th November; the Sewage Disposal Works for Rodborough and "Cainscross are now at work, whilst those for Thrupp have been nearly completed; and Bacteriological Diagnosis of Disease was "first undertaken at the cost of the public."

The plans for the sewerage of Painswick are ready, and application is to be made for a loan at the same time as for the water

supply. Attention is again drawn to the danger of contamination of water supplies by the "privy vaults" so common in the District, and it is urged that these should be replaced by cemented receptacles above ground.

"One of the results of the long continued and heavy rainfall— "especially that (as will be seen in the table of rainfall given at the "end of this Report) during June, July, August and October—has "been that the local supplies are yielding much more abundantly "than they have for many years. Another result has been that the "rain must have washed parts of the soil which generally escape "the action of a flow of water. As a consequence of this, some wells "and springs became contaminated, and Diarrhea was prevalent to "an unknown degree (as no means of certain information is available) "in parts of the District. In Woodchester it assumed epidemic "proportions during July, 50 persons out of 90 living in 25 houses "dependent on one spring being affected. This is all the more to "be regretted as the Council, recognising that the present supplies "are not safe for domestic purposes, called upon the Stroud Water "Company (which has the 'water rights' over nearly the whole of "the District), on the 8th of August, 1902, to exercise their rights, "and supply Woodchester with water. Another letter was written "to the Company in March, 1903, and on the 30th October, 1903, "the Council resolved to give the Water Company notice, under "section 52 of the Public Health Act, 1875, that they (the Council) "will themselves take steps to supply Woodchester with water at "the termination of six months. At the same time a similar notice "was given with respect to the supply of the village of Horsley, which "is at present dependent for its water chiefly on a series of springs, "collected into one channel running down the village with open "dip-holes in its course—in the gardens of the houses, and in one "instance at least in the house itself—while other sources are springs "and shallow wells."

Difficulties have also arisen in connection with the water supply of some new houses at Whiteshill, also within the limits of supply of the same Water Company. Wells are few, and the distances water has to be fetched are often great. It is pointed out that this is likely to deter building in situations where houses are wanted. 29 houses in Stonehouse are dependent on a polluted stream for their water. The plans for the water supply of Painswick are completed, and application is to be made for a loan to carry out the work.

Dairies, cowsheds, milkshops and slaughter-houses have been inspected as usual.

In connection with the Factory and Workshop Act, 1901, all the bakehouses have been specially inspected; 15 out of 56 were found to come within the definition of "underground" given in the Act, and steps were taken to have alterations made in some before certificates could be granted. In some cases the washing of clothes was found being done in the bakehouses, and in four cases "coppers" were fixed in them.

The Bye-Laws with respect to Nuisances and New Buildings were sanctioned by the Local Government Board in November, and the Regulations with respect to Dairies, etc., were "sealed" by the Council in August.

Only 70 cases of infectious disease were notified during the year: 33 cases of Diphtheria occurred, 27 in connection with a school outbreak of this disease at Horsley, though there was reason to believe that the number of cases was considerably larger than this. Two children (who had just come straight from the school) were found in the later acute stages of the disease. Owing to the carelessness which was displayed, it was found advisable to prosecute the parents of one child for allowing him to run about the public roads, and they were fined by the magistrates. After the receipt of the circular letter re Bacteriological Diagnosis from the County Council, the District Council made arrangements for this work to be undertaken at their expense.

It was hoped that the Isolation Hospital would be ready for occupation within six months.

The usual statistics are given, together with a chart, on which is shown a comparison of the various rates in this District, the Stroud Urban District, and in England and Wales from 1875 to 1903.

The results of a special investigation which was made into the distribution of Cancer, Tubercular Diseases and Pneumonia, in this Union and in the administrative County, are shortly summarised in this Report. Further details of this inquiry are given on pages 20 to 23.

The Table of Rainfall taken at seven different stations in this District shows that the total rainfall for the year exceeded the average by 41 to 50 per cent.

The Reports of the Sanitary Inspectors (Mr. A. Bailey and Mr. J. Hall) give a statistical summary of the work done during the year.

(GLOUCESTERSHIRE PART.)

Area 26,301 Acres. Population 1891 .. 3,983

1901 .. 3,800

Decrease 1891–1901 .. 183 (4.6 per cent.)

Estimated population 1903 .. 3,764

Medical Officer of Health .. F. T. Bond, B.A., M.D., F.R.S.E.

Dr. Bond remarks that the birth-rate, though slightly higher in 1903, was nearly 10 per cent. lower than the average birth-rate of the rural parts of England and Wales generally.

Three cases of Scarlet Fever occurred during the year. "In a "sparsely populated Rural District like this the work of arresting "the spread of infection is, of course, much easier, if it is only dealt "with promptly, than in larger centres of population. Familiarity "with Scarlet Fever, especially in the mild form which has charac-"terised it in later years, has not yet bred that contempt of the disease which people are getting to feel in less secluded localities. "So long as this healthy dread of being tabooed by their fellow rustics, as having been visited by a dispensation of Providence which is largely connected in their minds with its being a penal consequence of dirt, continues, the need for an Isolation Hospital in such a District as this will be small."

This District appears to be exceptionally favoured in its supplies of water, due mainly to private enterprise and munificence. "Thus "Shipton Moyne, Weston Birt and Lasborough are supplied from "the Holford Estate; the West Gloucestershire Water Company's "water is laid on to Didmarton; Avening has a "good supply by pipes, provided a few years ago by the efforts of some of its leading residents; Cherington has for a long time had a "supply which it owes to Miss George."

Dr. Bond deprecates any suggestion of change in the administration of this District, saying, "personally, I may be allowed to express "the hope that a District so interesting as this is from more than one point of view, may succeed in maintaining its existence as an entity amongst the Sanitary Authorities of the country, for I feel assured that the interests of its inhabitants are not likely to be better looked after by any administrative body than they are by the present "Rural District Council of Tetbury."

In summarising the Report of the Sanitary Inspector (Mr. M. Warne), Dr. Bond refers to the development of the milk industry on the Cotswold Hills, and remarks "it is an interesting illustration of "the change which has come over the Cotswold farming that, while "the barley, which used to be its most valuable product, now occupies "a comparatively low place in the crops of the district; milk, which "formerly was scarcely produced at all, is now increasingly relied on "to pay the rent."

(GLOUCESTERSHIRE PART.)

Area 28,366 Acres. Population 1891 ... 5,139
1901 ... 4,986
Decrease 1891–1901 ... 153 (3 per cent.)
Estimated population 1903 ... 4,986

Medical Officer of Health .. A. Fowell Turner, L.R.C.P., Ed., J.P.

Mr. Turner says "in small county Districts there is as a rule no "very great difference in the statistics from year to year, and the past "year is no exception in this respect."

"Three cases of Small Pox have been notified during the year imported from Dudley by a girl who had been there on a visit. She returned home and to school, where she was a monitress, and a few days later complained of feeling unwell, and went home. She resumed her duties at the school about twelve days later, when she was noticed to be covered with scab; but nothing was thought of it. Seven days later her father was taken ill, and shortly after another daughter was attacked. The father's was a very bad case of Confluent Small Pox. They were all removed to the Isolation Hospital (at Tredington), and all recovered. All three cases had been vaccinated in infancy, but not since. Their ages were 46, 16 and 8 respectively.

"All the children at the school, whose parents would consent, were re-vaccinated. The schools were closed until they had been thoroughly disinfected and lime-washed. No further cases arose. The bedding and clothes of the infected cases were burned, and the house carefully disinfected and lime-washed. The cost of the Sanitary Authority in replacing the bedding and clothes would have very nearly paid for the steam disinfector, the purchase of which I have now advocated for some years."

The cases of Scarlet Fever were removed to the Borough "Hospital, in accordance with the arrangement of last year.

The water supply of Kemerton from Bredon Hill is now completed. "Oxenton, Woolstone and Stoke Orchard derive their supply from "the Cotteswold Hills, and the water supply is very good and "abundant." Part of Ashchurch is supplied from the Cheltenham mains. "The hamlets of Aston, Fiddington, The Holmdown and "Walton Cardiff have almost entirely to depend upon water from "pools. The difficulty in obtaining a pure supply of water in these "hamlets is very great, as wells, when sweet, are almost invariably "found to contain saline matter, and the hamlets in question are so "small that the expense of conveying water to them from the "Cheltenham Corporation Works would be ruinous. It is a matter "of considerable importance, but unless the water is obtained from "the Cheltenham mains, I am at a loss to suggest any other source of "supply." In each Report for the last four years reference has been made to the need of a water supply for these hamlets.

The scheme for the drainage of Kemerton appears to have been carried out. Mr. Turner says the connections will very shortly be finished. Another scheme is being prepared for Newtown, in the parish of Ashchurch. "In the meantime the houses are without "any proper drainage, and cannot be described as being in a sanitary "condition."

With respect to vaccination, Mr. Turner says there has been "a "very great improvement on the record of the last ten years." A new Vaccination Officer was appointed in 1902.

An account of the working of the Factory and Workshop Act is given, dealing more particularly with "underground bakehouses."

Area 56,300 Acres. Population 1891 .. 16,765

1901 .. 16,565

Decrease 1891–1901 .. 200 (1.2 per cent.)

Estimated population 1903 .. 16,537

Medical Officer of Health . . F. T. Bond, B.A., M.D., F.R.S.E.

This is the 31st Annual Report which Dr. Bond has made since his appointment as Medical Officer of Health. With respect to housing, Dr. Bond says "during the ten years ending April, 1901, "there were 41 houses closed." None were closed during 1903, but "as there is no reason to assume that activity in this direction has "been suspended during the past three years, it may be inferred that "the scope for this department of sanitary procedure has, for the "present, at any rate, become considerably restricted."

The number of cases of Scarlet Fever during 1903 was 42, whereas there were 186 in the previous year. The last epidemic occurred in 1893. "Diphtheria was almost entirely absent." There were three cases of Typhoid Fever. A nurse was provided for one of the last-named, and his home (a cottage) used as a Hospital; but considerable difficulty was met in getting the cheque for the expenses passed by the auditor. Dr. Bond comments on this, and points out that "the "unreasonableness of the position is not diminished by the fact that "the same body, acting as Board of Guardians, can provide a nurse "in such a case."

"The site for an Isolation Hospital still exists, but no further progress has been made in providing one." This site was purchased and enclosed in 1900. A farmhouse was obtained in 1896 for isolating Small Pox.

Dr. Bond considers the statistics for vaccination for the three years 1900–1902 are "very satisfactory."

Measles was prevalent in the spring, and necessitated the closure of two schools for a month each. One infant school was closed owing to the prevalence of Whooping Cough.

"No (drainage) works have been carried out during the year, and no circumstances have occurred to indicate any pressing need for them."

"The abundance of the rainfall during the year has relieved for a time the difficulties of the residents in the Marsh District, who are dependent on rhine water for drinking as well as other purposes, and who are much troubled in dry seasons to get any water at all that is fit for use." During the year the mains of the West Gloucestershire Water Company were extended to Almondsbury.

Dr. Bond, after summarising the Report of the Sanitary Inspector (Mr. F. Williams), says "it affords as satisfactory evidence as its "predecessors have done for many years past of thoroughly efficient and painstaking work, the result of which is seen in the generally good sanitary state of the District, so far as it can be maintained by individual effort unsupported by the outlay which is necessary to solve the really serious problems of sanitary administration."

Area 10,097 Acres. Population 1891 .. 13,118

1901 .. 15,945

Increase 1891-1901 .. 2,827 (21.55 %)

Estimated population 1903 .. 16,830

Medical Officer of Health .. W. Murray, M.D.

Dr. Murray gives a full general description of the District, its configuration and industries, and refers to the suggested annexation of a part of the parish of Mangotsfield by Bristol. He says "on "the part of Mangotsfield there is no reason at present for any "change, and there are many reasons for no change."

Speaking of the sewage outfall works at Mangotsfield, with respect to which complaints were formerly numerous, Dr. Murray says: "I have not heard any complaints this year by neighbouring "Authorities. Your Surveyor is now in charge, and will report."

For several years Dr. Murray has called attention to the nuisances caused by "the large number of houses whose water closets are "hand flushed. If the flushing is done regularly and at short "intervals, the system works well enough; but in cottage property "where this plan most frequently obtains, the inhabitants are most "careless, the water closets become filled to the brim, and the "flushing causes a large deposit of decomposing material to be "rushed to the small house drains, where stoppages frequently occur, "giving rise to little lakes of decomposing sewage "houses in Warmley, Warmley Batch, Cadbury Heath, Longwell's "Green, North Common, Oldland Common, and Bitton Village "more or less pollute the brooks directly, while over all the area the "cesspools are designedly leaky constructions, which must cause "contamination to the underground water and wells "The general use of earth closets would obviate a part of the dirt "and danger thus engendered."

No improvement has been made in the manner in which the cesspool at Cadbury Heath School is cleansed.

In dealing with the question of the water supply of the District, the same complaints are made with respect to Dibden and Barton Farms, Blackhorse and Moorend Cottages, Pomphrey and Webb's Heath, as in previous Reports. "Viney Green supply has been "improved, but a great deal remains to be done." Dr. Murray advises that "proceedings be taken to enforce people at North "Common to have pure water." He has condemned several supplies at North Common, where the West Gloucestershire Company's water is now available, on a guarantee from the District Council.

The slaughter-houses are said to be better than last year. "The "milkshops are difficult to watch (but in) the large "dairies everything has been done according to order and Bye-Laws."

With respect to the question of the provision of an Isolation Murray says: "I believe we still have a Hospital, Dr. "share in the Hospital at Keynsham. This contains 12 beds, "of which we have control over six. When a case is sent "there the establishment has to be made up, by which great "delay is caused. Its situation is seven miles from the bulk of our "population. The ambulance is a cab, and a horse has to be hired "on each occasion, and the cab disinfected. The disinfector (a "Lyon apparatus) is also at Keynsham. Clothes have to be carried "there in an uncovered conveyance, for which a horse has to be "hired, and this wastes a long day of your Inspector's time, while "he ought to be otherwise employed. Taking all these incon-"veniences, which are real-not fanciful-into consideration, it "seems to me that a junction with Kingswood would be our best move. "I drew up a Report on what we wanted, along with Dr. Perrott, "M.O.H. for Kingswood, and there was some activity shown by "both Councils in the matter. I understand there is great difficulty "in getting a suitable site; but the activity has passed into passivity, "and we are no further forward than we were at the time of writing my last Report. I understand there is now some notion of Keynsham "joining Kingswood and ourselves. But if the Hospital is to be "placed out of district six or seven miles away from almost 20,000 of its inhabitants, I object to the union; because Kingswood and ourselves could get a site very much more central, and everything "—Hospital, Disinfector, Ambulance, and covered Cart—would be "all much nearer.

"I am thinking just now of a Hospital for infectious diseases other than Small Pox. To have a Small Pox Isolation Hospital, it must be separate by a considerable distance from the General Hospital, and that would involve the acquisition of much land. But the present Hospital could still be retained for Small Pox, (which was its original purpose), and the new Hospital, or Hospitals, used for cases other than Small Pox. I am sure the building of such an Institution would be beneficial to the neighbourhood, and is your statutory duty; and I also hope that another year will not pass away without some concrete action being taken."

The total number of notifications received during the year was 143. Of these 89 were cases of Scarlet Fever, which "have always "been present in small numbers at a time, scattered over the whole "District . . . the disease still remains of a mild type." There were 27 cases of Diphtheria, with six deaths, a heavy case mortality of 22 per cent. Diphtheria Antitoxin is provided free by the Council amongst the poor.

Dr. Murray finds "that home open-air treatment (of Consumption) is practised in this District to a considerable extent with fair "results. There does not seem to me any reason why home "treatment cannot accomplish good results, provided the physician "inculcates proper rules, and has the influence over his patient and family to carry them out. Of course, there is always the danger to others through carelessness. A hospital regimen for, say one or "two months, would be a great help. But there is always the difficulty for the poor to obtain that."

The Sa atorium for Consumption now being erected for the three counties of Gloucestershire, Somersetshire and Wiltshire at Winsley, near Limpley Stoke, will early next year provide a certain amount of accommodation for such cases, but, as it will contain only 60 beds, a great extension will be necessary to adequately meet the needs of these three Counties.

The Report of the Sanitary Inspector (Mr. C. R. Cross), which is printed with the above, gives, in addition to the usual details of sanitary work done, a special Report on the working of the Factory and Workshop Act, 1901.

Tables of the rainfall at Pucklechurch, and of the results of an examination of the sewage and sewage effluent at Mangotsfield, are appended.

Area 21,461 Acres. Population 1891 .. 11,697

1901 .. 12,624

Increase 1891–1901 .. 927 (7.9 per cent.)

Estimated population 1903 .. 12,520

Medical Officer of Health .. P. Buchanan, M.B.

Dr. Buchanan gives a short general description of this District: "the conformation is distinctly undulatory, being intersected by deep "valleys." The population is engaged chiefly in mining, but the parishes of Newland, English Bicknor and Staunton are mainly agricultural. He estimates that the population is 100 less than last year, as "many of the single young men have been obliged by stress "of circumstances to leave their homes in search of employment "elsewhere." But "17 houses have been built, and 42 have been "altered and enlarged," while 12 have been closed.

The birth-rate has fallen from 34·2 to 33·3, still, however, almost the highest in the County. The death-rate is practically the same (14·5). The infantile mortality has risen from 93 to 98, an increase which Dr. Buchanan attributes to an increased mortality from Measles and to Diarrhæa and Enteritis, "diseases frequently caused "by improper feeding."

The number of cases of Scarlet Fever—of which disease there were 177 cases in 1900 and 171 in 1901—fell to 30 last year. Two schools, however, were closed for this cause, Dr. Buchanan "having "satisfied himself that the disease was being spread by undetected "cases attending the schools." There were also two cases of Diphtheria and one of Typhoid Fever. Measles was the cause of 10 deaths, 8 of them under the age of 5 years. It was considered advisable to close three schools owing to the prevalence of this disease.

"The District is not provided with an Isolation Hospital." Further reference will be found to this matter under "Coleford," and also under the heading "Isolation Hospital Accommodation." Dr. Buchanan also wisely urges the Council to provide a steam disinfector, as under present arrangements articles of dress cannot be efficiently disinfected.

Dr. Buchanan is of opinion that the general character of the District and the scarcity of water "renders a water-carriage system "of sewerage for any considerable portion of the District practically "impossible." In some cases a combined privy and ashpit have been adopted, but it is unsatisfactory to learn that "where the "privy midden still holds good, the refuse, etc., are thrown in "unsightly heaps either in corners of the garden or on the open "Forest land."

"Little, if anything, has been done since my last Report to "improve the water supply of the District, which is derived chiefly "from small surface wells, open draw-wells, and rain water tanks "constructed in the basements of the houses. As I have stated on "more than one occasion, these surface wells frequently fail in the "dry season, and the people dependent upon them for water are "much inconvenienced thereby, having, in many instances, to carry "for the greater part of a mile—always up-hill." In 1902 it was reported to the County Council by the Clerk to the Coleford Urban District Council that a correspondence was being carried on between the three District Councils (East Dean, West Dean and Coleford) with a view to a combined scheme of water supply. It would appear that this would be the best solution of the difficulties of the individual Councils in the matter of a water supply.

Slaughter-houses, bakehouses, dairies and other places over which District Councils have control are inspected periodically.

(Frampton Division).

Area 11,371 Acres. Population 1891 .. 4,250

1901 .. 3,785

Decrease 1891–1901 .. 465 (10.9 per cent.)

Estimated population 1903 .. 3,688

Medical Officer of Health .. C. J. Weller, M.R.C.S.

Mr. Weller says "the year has been one of an exceptionally wet "character, but, notwithstanding this, the health of the District "has been better than for many years past." For the first time no case of notifiable infectious disease occurred during the year. Measles was prevalent at one time, and the schools at Saul were closed in October.

Arrangements were effected by the Council for Bacteriological Examinations to be made by W. Washbourn, Esq., M.R.C.S., of Gloucester, for a period of six months. Mr. Weller considered that the time should be extended. Since Mr. Weller's Report was written the County Council have made such examinations possible (free of cost) throughout the Administrative County.

Dairies, bakehouses and workshops generally are said to be in a satisfactory condition.

"The nuisance at the schools at Eastington has been again reported, and, I believe, is still under discussion."

"There has been no scarcity of water during the year, but the suggestion for a water supply at Nastend, Eastington, has, I think, not met with any result as yet."

"Vaccination in parts of the District is satisfactory, but Eastington is almost unvaccinated, and is a great danger to the rest of the District."

(HARESFIELD DIVISION).

Area 13,012 Acres. Population 1891 ... 2,603
1901 ... 2,320

Decrease 1891–1901 ... 283 (10·9 per cent.)

Estimated population 1903 ... 2,265

Medical Officer of Health ... G. T. B. Watters, M.D.

Dr. Watters says: "In January I had to report an outbreak of "Scarlet Fever amongst the children attending Whitminster "School." The school was visited and the children examined, and on one occasion "a child was found in an infectious condition at "school." Dr. Watters appears to be of opinion that "the most "likely cause of these cases was infection from mild cases such as "frequently occur in epidemics, with little or perhaps no rash, and "easily overlooked by parents or those in charge. Such cases, if "allowed to mix with other children, readily spread infection, "although themselves undiscovered."

Dr. Watters has reported to the Council on various possible sites for a Small Pox Hospital, and considers that "the requirements of "the Local Government Board could be met by some such scheme "as the following:—

"If the Rural District Council could come to some arrangement with the Stroud Joint Hospital Board whereby cases occurring in the Wheatenhurst Union of Scarlet Fever or Diphtheria requiring Hospital treatment could be removed into the new Infectious Hospital at Cainscross, then our existing Isolation Hospital near the Workhouse might be removed to a new site (within, say, half a mile of the Workhouse), as suggested, and used solely for Small Pox cases."

Referring to the arrangements for Bacteriological Examinations in cases of Diphtheria and Typhoid Fever made by the County

Council, Dr. Watters says "This action on the part of the County "Council meets, I need not say, with the cordial approval of all who "are interested in the public health, as the importance of an early "and accurate diagnosis in such cases cannot be exaggerated."

Disinfection of the rooms occupied by Consumptives is undertaken in this District when any patient dies from this disease.

Dr. Watters directs attention to "the evil results on the general "health" produced by "the pernicious habit of cigarette smoking "by the youths of the District," and considers that "it should be "made an illegal act to supply tobacco to a boy under the age of 16, "as it is now illegal to supply alcohol to a child under 12."

"During 1903 there has been an unprecedented rainfall, which, while bringing frequently disaster to the farmer, has flushed out ditches and watercourses, and provided everywhere a continuous supply to springs and wells, and has thus fulfilled a salutary and beneficent purpose."

Dr. Watters discusses dairy farms in detail, and says "the "question has now become a national one, and the public will not "rest long content with the present state of things. The milk trade "is comparatively a modern one, and one which calls for entirely new measures of control. Milk is now transported long distances and is collected from hundreds of farms to supply thousands of families. It is idle, therefore, to suppose that the methods which answered the requirements of our forefathers will be found adequate by those who have followed the growth of our knowledge of milk and its relation to disease."

Area 55,529 Acres.	_		9,106	
	. 190		8,709	
	crease 1891–190			(4·4 per cent.)
Estimated	population 190	3	8,709	

Medical Officer of Health .. William Cox, M.R.C.S.

"There have been 44 cases of Scarlet Fever . . . and five cases of Diphtheria, four of which were caused by an overlooked case which had come from Manchester, and had infected the family at Didbrook." Two schools were closed during the year on account of the prevalence of Scarlet Fever, and one on account of Diphtheria. Mr. Cox says: "I made a special Report to you on a case of Small Pox who left here for Stow-on-the-Wold."

"Toddington has had a plentiful and good supply of water brought to it by the owner, very much to the benefit of all the inhabitants."

"At Beckford considerable progress (though somewhat slow) has been made in the arrangements for a new water and sewage scheme. The question of sewage at Bishop's Cleeve is still occupying the

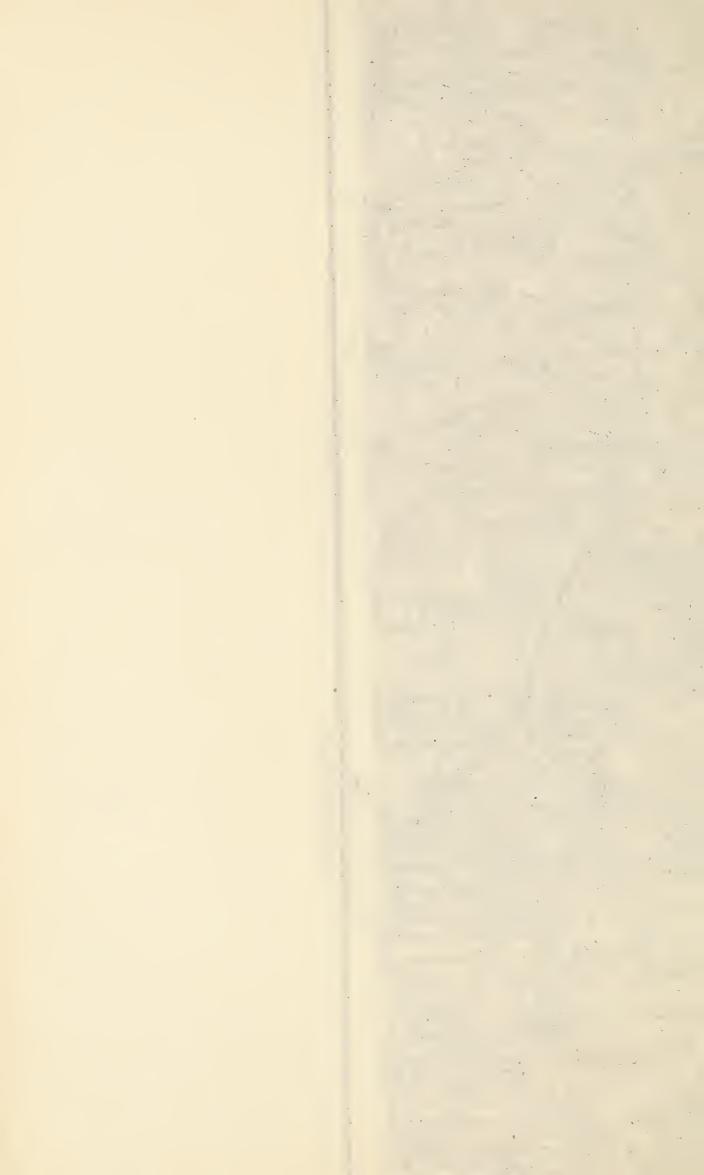
"attention of its local authorities."

Mr. Cox says: "I am pleased to find that my recommendations" in former years, that girls attending elementary schools should "have their hair cut short, has borne fruit."

URBAN DISTRICTS.

EPITOME OF RETURNS FROM MEDICAL OFFICERS OF HEALTH.

URBAN DISTRICTS.	М.О.Н.	Inspector.	SEWERAGE & SEWAGE DISPOSAL.		SCAVENGING.		DWELLINGS. No. built during 1943 General Character. Character Character. Character.				What Action taken under			ANCES.	Legal Proceed	Efficiency of Vaccination.	and	Rivers		IES AND SHOPS.	sc	CHOOLS.
			System in vogue.	Any Defects.	Privy Middens Cleansed by	Is House Refuse removed by District Council?	No. bui during 1953.	General Character.	Any Houses Unfit for Habitation.	Any Over- crowding of per- sons in houses.	Housing of the Working Classes Act, 1890.	tion systematic ally made.		Reported. Abated.	ings.	Tacomation:	seizure of Unsound Food.	Pollution		Outworkers.	110.	Gener Sanita Conditi
. AWRE	F. T. Bond, M.D	W. Willetts	Sewers in Blakeney, also commou Privies	The usual	By tenants	No	. 0		None formally reported		None	? What is meant	No infor	mation	None	Fair	No	None	11	15	3	Fair
. CHARLTON KINGS	H. B. Todd, M.R.C.S.	B. Hack	Sewers; outfall iuto Cheltenham	No		Yes, weekly	. 25	Cottages		. No	None	Yes	*			Very good						
CHELTENHAM	J. H. Garrett, M.D., D.P.H.	A. E. Hudson	. As hi	therto	None		103	Artizans dw'lings Various			Se	e Anuual Re	port						387	102		i
CIRENCESTER	F. T. Bond, M.D	T. Hibbert	Sewers ; some eom- mou Privies	The usual	By tenants	Yes	. 12	Various	7 closed 6 demolish ed	Occasionally	None	? What is meant	No infor	mation	Non	Good	1 seizure	None	48	No return	3	Satisf
COLEFORD	P. Buchanan, M.B	J. Harris	Some w.c., some buckets, some middens	Many w.c.'s hand flushed to old stone drains	Buckets by D.C., by owners & tenan	Yes	. 1	Cottage	5 closed	In one case	5 houses elosed	Yes	153	145	1	Very good	None	None	0	0	3	Fairly
HORFIELD (Glos.)	A. W. Peake, M.R.C.S.	J. A. Wright	Precipitation and filtration	None	In out-lying parts onl by tenants	y Yes, by contrac	62	Villas and Cottages		No	None	No	8	8	3	See Annual Report	None	None	0	0	1	Satis
KINGSWOOD	C. J. Perrott, L.R.C.P.I.	C. H. Waithmau C.S.I.	One system nearing completion		Ву D.C	Yes	45	Good	No	In oue case	None	Yes	122	120	2	Not efficient	1 seizuro	Noue	361	1151	7	Good
NAILSWORTH	J. M. Martin, M.D., D.P.H.	J. Hall	Privy Middens; many w.c., to cesspools & streams	Regular system wanted	By owners and teuan	Yes, by contrac in special area	4		improve-	l 2 eases	None	As far as practicable	50	50	1	No certain information available	None	None	11	22	3	Fair
NEWNHAM	F. T. Bond, M.D	W. Ellis	Newnham—sewers ; elsewhere common Privies	The usual	By tenants	No	0		None for- mally reported	No	None	? What is meant	No infor	mation	Noue	Good	20 boxes ish condemned	None	7	0	1	Fair
STOW-ON-THE-WOLD	E. Dening, L.R.C.P.Ed.	J. Hartwell	Privy Middens		By occupier	No	1	Fair	1			Yes	15	15		Large No. of		•••	***		3	Very
STROUD	J. M. Martin, M.D., D.P.H.	W. Parsons, C.S.I.	Water carriage, Chemical precipita- tion	Effluent, not satisfactory	Only few in Distriction by owners & tenants	Yes, by coutract	6	Deta'hed Villas	Some to be dealt with	2 cases	None	Yes	53	49	None	conscientious objectors No certain information available	Frnit & fish seized	None	102	155	6	Fair
TETBURY	F. T. Bond, M.D	M. Warne	Publie sewers aud some Privies	The nsual	By owners & tenants.	Yes	5	Various		Occasionally	None	? What is meant	No infor	nation	2	Fair	None	Noue	3 6	0	3	Fair
TEWKESBURY													***								•••	
WESTBURY ON SEVERN	F. T. Bond, M.D	C. Cadle	Common Privies	The usual	By tenants	No	1	No iufor- matiou		Not gener- ally	None	? What is meant	No infor n	nation	None	Fair	None	None	0	0	2	Fan



RURAL DISTRICTS.

EPITOME OF RETURNS FROM MEDICAL OFFICERS OF HEALTH.

RURAL DISTRICTS.	М.О.Н.	Inspector.	SEWERAGE &	SEWAGE DISPOSAL.	SCAVENO				ELLING		What Action taken under	Is House to House Inspec-		NCES.	Legal	Efficiency of	Prosecutions and	Rivers		RIES AND KSHOPS.	SC	CHOOLS.
101112 1101112010		1	System in vogue.	Any Defects.	Privy Middens Cleansed by	Is House Refuse removed by District Council?	No. built during 1903.	General Character	Any House Unfit for Habitation.	Any Over- crowding of per- sons in houses.	Housing of the Working Classes Act, 1890.	tion systematic	Reported	Abated.	Proceed- ings.	Vaccination.	seizure of Unsound Food	Pollution	Nos. I	Registered. Outworkers.	No.	General Sanitary Condition.
1. BARTON REGIS	E. Crossman, M.D	J. Hendersou	Water carriage iu Shirehampton, Avoumouth and Westbury.	None	. By owners and tenants	Yes, in Shire- hampton and Westbury	26 9		iu Repor	l In Report	Nonc	Yes	357	348	None		None	Noue	18	None kept	13	Fair
2, CAMPDEN	G. Fiudlay, M.B	C. J. Gauder, C.S.I.	· ·	Report	By owners and tenants	s No	No record		in 1 case	.1 case	See Report	Yes	40	36	None	Good	Noue	None				
3. CHELTENHAM	J. F. Johns, M.D., D.P.H.	J. Weaver	Sewers, Cesspits, Sewage Farms	Those common to all Cesspits	By owners and tenauts	No	8	and	Noue con demned a		No	No			None	Fair — 56 %	None	Noue			9	Fair
4. CHIPPING SODBURY	F. T. Bond, M.D	J. B. Adams	Water carriage iu Chipping Sodbury and Wickwar, else-	The usual	By tenants, mostly	. No	21	Villas Various		- Occasionally	None	? What is meant		mation		Good except in Frampton Cotterell	None	At Wickwar	44	223	23	Generall satisfacto
5. CIRENCESTER	F. T. Boud, M.D	W. B. Harmer	where Cesspits & Common Privies Mostly Common Privies	The usual	By tenants	No	7	Various		- Occasionally,	None	Ditto	No infor	mation	None	Good thro'-	None	Noue	72	None	33	Fair
6. DURSLEY	F. J. Joynes, M.R.C.S.	T. Robinsou		Too many Privies, with Vaults	By owners or tenants	Yes	6	Fairly Good	ported Noue	1	None	No	129	129		out District Improved	None	None	126	3	20	Good
7. EAST DEAN AND UNITED PARISHES	F. T. Bond, M.D	W. Ellis	Water carriage at Cinderford and Mitcheldean, else-	The usual	D.C. in Cinderford, elsewhere by tenants		26	Various	2 closed	Occasionally	None	? What is meant		ination		Not satisfactory	6 seizuresfish	None	43	None known	16	Generally satisfactor
B. FARINGDON			where various															•••				
O. GLOUCESTER	F. T. Bond, M.D	F. Weaver	Sewers in N. End District, elsewhere mostly by Road	The usual	By tenants	No	7	Various	mally re-	Occasionally	None	? What is meant		mation	Noue	Improving	None	None	17	None known	16	Fair
D. LYDNEY	F. T. Bond, M.D	G. J. Elliott	Drains	The usual	By tenauts	No	10	Various		Not generally but some in Tidenham as a result of de-		? What is meant	No infor	mation		Variable; good in Lyd- ney parish		None	8	Noue	10	Fair
1. MARSTON SICCA	A. Thompson, M.D	J. Izod	Midden Privy		By owners and teuants	No		77-1	g., 1	velopment of stone quarry- ing											e	
2. NEWENT	D.P.Ĥ. W. N. Marshall,		W.C. in Newent,		_	No	3	Fair	Some be- low fair Standard None		None	Yes	10	10	None	Under 50%	None	None	•••		14	Good
B. NORTHLEACH	M.R.C.S E. J. R. MacMahon L.R.C.P.I.	J. Waine	with Filter Beds		By owners and tenants			Satisfae-			None	Yes No, but sys.	83	25	None	Efficient						Good
I. PEBWORTH	Cecil A. Corke, F.F.P.S.	H. S. Harvey					1	tory	9 made	3 (abated)		inspn, of Dis.			Hospital removal				21			
5. STOW-ON-THE-WOLD									fit.													
6. STROUD	J. M. Martin, M.D., D.P.H.	A. Bailey J. Hall	PrivyVaults. Water carriage in Cains- cross, Stouehouse and Rodborough	All Vaults, from pollution of ground and sub-soil water	Owners and tenauts, except in Stonehonse by Parochial Council	cils in Cainseross.		and	Some close- ly border- ing on this condition		In 1 case house pulled down	As far as practicable	362	360	2	No certain information available		None	76	170	47	Fair, sor
7. TETBURY	F. T. Bond, M.D	. M. Warne	Privies & Cesspits	The usual		Stonehouse and Thrupp No			None for-	Occasionally	None	? What is	No infor	mation	None	Good	None	None	4	0	10	Good
3. TEWKESBURY			•••						mally re- ported			meant 					***				ļ	
9. THORNBURY	F. T. Bond, M.D	. F. Williams	Dry Closets iu Thorubury & Berke- ley, some W.C.'s, elsewhere Ordinary	The usual	D.C. in Thornbury & Berkeley, elsewhere by tenants	At Thornbury & Berkeley	27	Various		Occasionally, in places	None	? What is meant	No infor	nation	None	Good	None	Complaint to C.C. re Wickwar	167	16	22	Fair
0. WARMLEY	W. Murray, M.D	. C. R. Cross	Privies	See Surveyor's Report	By owners and tenants	In Mangotsfield		6-8 roomed	Some in Bitton	Not now known	None	Yes	23	23	None	Not good	None	? Injunction ag'nst Kings-	341	760	10	Very satisf
2. WHEATENHURST-	P. Buchanan, M.B	. W. J. Blanch	Combined Privy & Ash Pit & Midden Privy	Insufficient accommodation and dilapidated	By owners and tenants	3	17	honses Work- men's Cottages	Parish 23		Yes, in 15 cases	Yes	400	335	8	Very good	None	wood None None		0	12	Good
	C. J. Weller		Privies, mostly		By owners and tenants	No	2	Cottogga	No	No	NT	77	60	67	None	Umost wil in	None	None	6	6	7	Good
	G. T. B. Watters, M.D.	. ,,			By owners and tenants		}	Cottages Cottages		No 	None	Yes Yes	69 26	67 26		Almost nil in Eastington Good	None None	None	6	6	6	Satisfacto
23. WINCHCOMBE	W. Cox, M.R.C.S	. C Garduer	Dry Privies aud Water Closets		By tenants	No			Nonc re-	Noue report-	None	No			•••	Good	Noue	None	0	o	21	Good

